Other Works by the Same Author.

1. Sixty years of Indian Finance.
2. Indian Currency, Exchange and Banking.
3. Trade, Tariffs, and Transport in India.
4. Wealth and Taxable Capacity of India, (in collaboration with K. J. Khambatta).
5. Governance of India (in collaboration with Miss G. J. Bahadurji).
6. Constitution, Functions and Finance of Indian Municipalities (,,)
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10. Congress Select Committee's Report on the Foreign Obligations of India.
11. Ethics of Public Debt.
12. Eleven Points of Mahatma Gandhi.
13. World Depression.
14. **Splendour That was 'Ind.**

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LECTURES

ON

THE CONSEQUENCES

OF

POST WAR PRICE CHANGES

Delivered in March, 1934, under the auspices of the University of Delhi. Sir Kikabhai Premchand Readership

BY

K. T. SHAH

UNIVERSITY OF DELHI,
1935.

A. G. m. D.

Tempus Fugit.

PREFACE

These lectures were delivered, under the auspices of the Delhi University, in March 1934. and the Lecturer owes an apology to the public for the very considerable delay that has taken place in publishing them. Political developments in the country, from April to October, 1934, were responsible for the author's part of the delay in putting the lectures into a form suitable for publication. All subsequent delay is due to the fact that the Lectures were printed in Delhi and the writer resided in Bombay. Though orginally arranged to be printed and ready for publication before the end of March 1935, the press could not complete the work till even six months after the stipulated date; and hence the delay, which is very much to be regretted.

The delay is the more to be deplored because of the inevitable falling out of date of many a statement made in the text. Effort has been made to bring up the material as nearly upto date as was possible under the circumstances, but the writer is keenly conscious of the frequent falling out of date that still mars the utility of his work.

The delay in publication having been already unconscionably long, it has been deemed necessary to avoid further delay by cutting out an Index to the work, which would have, in normal circumstances, been surely added.

The author's debt to other publications and authorities having been acknowledged in the proper place, a bibliography has been omitted, mainly of course to save further delay. The author trusts that, in spite of these omissions and limitations of his work, it will be not without its utility to the student of contemporary economic developments.

SIMLA,
9th September, 1935.

K. T. SHAH.

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ON
THE CONSEQUENCES
OF
POST-WAR PRICE CHANGES.

LECTURE No. 1

Introduction: Method and Scope.

Introductory:

As you are aware, I am going to consider, in this Series of Lectures, the changes that have taken place, since the World War came to an end, in the general price-level all over the world; and the economic consequences of those changes. I propose, in this Introductory Lecture, to explain to you how I view this whole Series of Lectures, the method I shall adopt in treating of the subject, and the scope I assign to the Series as a whole.

Conception of the Series.

I look upon this series as an investigation, over a period of 15 years, of (*a*) not merely the details of the price changes in the several commercial countries of the world, but also (*b*) a study of the main currents, or motive forces, that have contributed to those changes. The latter is, indeed, the more interesting and instructive study. The particular price changes will, no doubt, be illustrated and explained, and also their several consequences. But I shall lay emphasis rather on the root causes of the movements, than on the movements themselves. For prices I consider to be only a concrete symbol, or outward expression, of the economic forces, which underlie the complex phenomena that make up modern economic life. They attract more general notice, as the dynamics of economics. If we would understand the real forces that determine these economic changes, affecting our individual as well as our community life over a series of years; if we would realise the true nature of the consequences that result from these hidden

movements, and appreciate correctly their true place in the socio-economic life of the human family, we must penetrate below the surface waves indicated by the price changes, and visualize, analise, and explain to ourselves the nature and strength of these ground currents, which are symbolised ultimately at the surface, and visible to the naked eye, in the form of price movements.

HIDDEN SPRINGS AND RAMIFICATIONS OF PRICE MOVEMENTS.

The study, then, in this Series, will concern itself with the movements of prices, not only in a given country, but all over the world, wherever sufficient statistics and material is available for such consideration. The most obvious consequences of these price changes consist in: a (*i*) reorganisation of industry, (*ii*) redistribution of international commerce, (*iii*) revision and redirection of national as well as international policies in matters economic.

COMPLEXITY OF THE PROBLEM.

The consequences of these price changes would not be so easy to gauge, or so simple to understand. But these concern those socio-economic phenomena, those problems of modern life, in which cause and effect are so mixed up, in which the merely economic is so deeply involved with the psychological and political,—that the student must often despair of ever being able to disentangle these several forces or phenomena, and study them in isolation as in a laboratory. Whether the intensive and aggressive Nationalism in the newly born communities of Europe is a cause or effect of these economic forces; whether the political alignment, and the growing social ferment all over the world, is the source, or the creation, of these forces; whether the innumerable and often conflicting devices adopted in the various countries for regulating prices at home, controlling and stabilising exchanges, and promoting trade with the world, at the same time that each country seeks self-sufficiency for itself, have succeeded in their professed objective,—these are questions so intricate, and reacting so gravely on one another, that the student often fails to observe their mutual relation and connection. I shall, however, try and analyse before you such of those direct, and even remote, consequences of price changes, as I can trace, in order to give you as clear and connected a picture as can possibly be pieced together out of this chaos.

PECULIARITIES OF THE PERIOD STUDIED:

(*a*) *War.*—As you are aware, the period over which this study extends is one of the most stormy and eventful in the history of mankind. For not only does this period commence at the end of the World War of unprecedented dimensions, involving millions of combatants on either sides; but also disorganizing the social and economic life of the world, to a degree and in a manner, for which history has no parallel.

(*b*) *Industrial Revolution.*—We notice in this period such a considerable movement of price-levels, and so many efforts made for controlling, regulating, or stabilizing that level, that, even if we consider only the surface movements, the study would be replete with the utmost interest. But when we penetrate below this surface of events, and seek the root causes of those movements, in each unit or group of units called countries, we meet with so many phenomena, so many changes in the industrial organization of the world as a whole, and of the several countries making up the modern commercial community of mankind; we note so many features of a revolutionary character in the technique as well as the forms of industry, the extent of agriculture, the direction of commerce, that, by itself alone, this second Industrial Revolution that has happened since the end of the World War would repay the closest study.

(*c*) *Labour Displacement.*—Following the World War, again, there has been such a displacement of labour, particularly due to the dislocation caused by the war,—but largely also due to those technological changes just mentioned,—that the reaction of these Labour movements on employment in general, and on the purchasing power of the people as a whole in particular, offers another fact of abiding interest during this period.

(*d*) *Changes in the Direction of World Trade.*—The commerce of the world, moreover, is affected materially and vitally by those industrial changes and technological revolution, which the Governments of the world have been unable to control by all their attempts to fit their Fiscal systems to these economic changes. Nor are any better results obtained by the devices of exchange control, currency regulation, or economic protection. The phenomenon of exchange movements is, in itself, remarkable during this period, as a series of isolated

efforts have been made, by individual countries, as well as in co-ordination with the world as a whole, to regulate currencies, at first according to the accepted notions of stability in exchanges, and recently on the more heterodox lines, that, by themselves, have made the complexity of the situation greater than ever. The reaction of all these on the public finance of each country, on its social legislation, and on the international balance of payments, is inevitable. And so the machinery regulating the economic life of the world becomes disjointed and complicated, more than ever, at a time when we most need its smooth and efficient work.

(c) *New Ideals of Life.*—Finally, there has been such a revolutionary change in our ideas of Economic Laws and forces; in our conception of the status of the individual, and of the well-being of the community as a whole; of the claims of the citizen upon the common effort of the community; of Institutions,—like private property, or the individual family—and the ideals, like those of personal freedom, that this aspect of the period, elusive and undefineable as it may be, offers its own attraction and fascination to the earnest inquirer.

Though these ideas have not yet been properly co-ordinated into a commonly accepted philosophy of economic action, and of social life in general; though social thinkers are still groping their way in the darkness, it is indisputable that these new ideas have come to stay, that they have begun to influence the community life and action in many places, and that, unless they are properly co-ordinated and systematically given effect to, the Drama that we see unfolding itself before our eyes will end in a tragedy, —a futile tragedy.*

THREE OTHER EVENTS OF INTEREST.

Side by side with these most interesting and complex phenomena, that lend their own charm to the present study, we notice in the history of this period *three major events,* or developments, that cannot be classified in any of the categories given above. They stand, as it were, *sui generis,* in a class by themselves. These are, in their order of occurrence:

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* Cp. Strachey: *Coming Struggle for Power.*

first, the Russian Revolution, and, as its consequence, the complete re-organization of the socio-economic life in Soviet-Russia.

(1) RUSSIAN REVOLUTION.

(*a*) *The Russian Revolution* is a colossal experiment, still in the making. They have discarded many of the pet theories and favourite dogmas of the capitalist economists. They have shattered in their country the scheme of things entire, and are busy remoulding it to their heart's desire. In that process of remoulding, they are constantly shifting ground, and readjusting the parts and cogs of their new socio-economic machinery to suit changing conditions. Consistency, they prove, is a virtue of fools. They have been reforming the motive of human action, and revaluing the results of such action. Russia is a closed land, in a manner of speaking, carrying out her new plans, and giving effects to her new ideals, working out her own social life, realising her own ideas of human dignity, in isolation. But even so, even while the experiment is in progress, their Revolution is having its reaction upon the rest of the commercial world beyond the frontiers of Russia. Hence, that experiment and its achievements cannot be left unnoticed in any study of the kind attempted in this series.

(2) ECONOMIC DEPRESSION.

(*b*) Secondly, the world Depression in the capitalistic countries has forced upon the commercial nations of the world the need to reconsider their very basis, and the entire super-structure of their socio-economic life. The present Depression is at least four years old all over the world, except Russia; and in many countries much older. Like the Russian experiment, it is still going on. The economic life of the world has been jarred and shocked by it out of its foundations. Unlike, however, the Russian experiment, the countries of the world have not failed, jointly as well as severally, to attempt to remedy it,—unfortunately without any success hitherto. The leaders of opinion and the rulers of mankind may, for their own reasons, talk of returning prosperity, and note the signs and portents of a revival. But the Depression still continues, and mankind is suffering from it in ever increasing numbers. Such a world-wide phenomenon, so strikingly evidenced by profound changes in the price-level, cannot fail to have its repercussion on the

economic life of our times. We cannot, therefore, in this study, afford to neglect it.

(3) AMERICAN EXPERIMENT.

(*c*) Finally, the most recent Experiment of the Roosevelt Administration in the United States of America is bringing its own crop of consequences to the world. Born of the world slump, and designed to cure it, the Roosevelt Experiment evidently is no mere palliative, no mere stop-gap shift to tide over a temporary, transitory emergency. No matter how its authors and sponsors had originally conceived it; no matter how its ultimate goal is envisaged by those who guide to-day the destinies of America, the fact remains: that this Experiment is having, by the many-sidedness of its attack upon the problem, by the radical nature of the remedies proposed, by the courage and persistence of the authorities responsible for its execution, a reaction comparable only to the Russian Experiment started by people literally poles apart in social ideals and organisation. The American Experiment is thus no less worth considering in this series than the Russian Revolution.

You will see in the following Lectures of the Series that each of these has a most vital bearing upon the subject of our enquiry. I shall, accordingly, give each its due place and importance, and shall endeavour to corelate these scenes mutually in the World Drama as a whole that I propose to sketch before you.

SCOPE OF THE SERIES: BACK-GROUND FOR THE DRAMA.

In this explanation of the nature and purpose of these Lectures, I have also indicated the main themes that I will take up for special study. After this Introductory Lecture, I shall review, in the next Lecture, the salient features of the background, on which the drama of the Price movements and their consequences unfolds itself in the following 15 years. The background is in itself interesting and abnormal, thanks to the World War and the havoc wrought by it. But even if it had no special interest of its own, its proper understanding, is necessary and indispensable, because, without such an understanding, we may not be able fully to appreciate the real nature of the developments that follow. I shall, therefore, offer no further apology for devoting a whole Lecture to an analysis and appreciation

of the situation as it was in the principal countries of the world, at the commencement of the period of our study, as that situation contains the seeds of the crop of events that follow, the germs of the *malaise* from which the world is still suffering.

BASIC FORCES: NATURE OF PRICE.

In order to understand the root causes, and in order to perceive and realize completely the motive forces dominant in the period under review, and affecting the main subject of our enquiry, it is necessary that we must analize and understand the Laws, if any, that govern Prices, the factors that explain their movements. That will, therefore, form the subject matter of the next Lecture (III).

MEASUREMENT OF PRICE CHANGES.

The factors or causes that regulate and determine the changes in the price movements, and the methods or devices by which we endeavour to definitise these changes, and measure them, is likewise a most interesting adjunct to the main study regarding the economic laws, if any, that govern price-making, and the factors that determine and regulate their movements. I propose to devote Lecture IV to that study. In this part of our study relating to the Laws of Prices and the factors affecting their movements, we shall have to examine, not merely the local circumstances and special conditions of each country, its industry and commerce, its economic organisation and financial policy, but also to consult these changes with reference to their proper place in the world movements and developments as a whole. The study must, of course, explain how far the accepted Laws of Price-formation and of Price movements may be said to have been at work during this period, and how far these laws have been departed from. We must try and explain, not only the main phenomenon, but also in what respect our notions regarding these laws and factors are either misconceived or need revision.

POST-WAR REHABILITATION.

The study of the Laws of Prices, and of the factors affecting their movements, as well as the devices for measuring these movements, will thus form the subject-matter of my third and fourth lectures. The next Lecture I shall

devote to consider price changes, not so much by individual countries or individual commodities, or by groups of commodities; but in accordance with certain well-marked periods which I shall explain to you in a moment, in which a dominant factor, or principal tendency, may be said to have been at work. The subject prescribed for this series is, as you know, the *Consequences of Price changes* in the years following the World War. Now, we cannot, I think, have a correct understanding of these changes and their consequences; we would, I fear, fail to appreciate their singnificance and real place in the economic history of mankind in the last fifteen years, unless we study them as general tendencies, caused or affected by some dominant factor or condition arising out of,—or inherent in,—the situation. This the price changes in particular commodites may not reveal at all, unless considered in proper perspective.

PERIOD OF RECONSTRUCTION,—1919-24.

Thus, for instance, the period of five years roughly, immediately following the War,-1919-24,—may be said to be the period, in which the countries exhausted by the World War are trying to re-construct their national economy, to repair the damages caused by the war, and to rehabilitate once again their Agriculture, Industry, and Commerce; their productive and distributive organisation. The ambition of all countries during this period seems to have been to return to the pre-war level in all economic and financial matters. One Lecture would perhaps barely suffice to examine the varied programme of National Reconstruction in the different countries; but that is all I can devote to that subject in this Lecture, emphasising, of course, the price movments and their repercussions throughout the world.

PERIOD OF RATIONALISATION:—1925-29.

When the Reconstruction is more or less complete, when the economic system in the leading countries of the world has been rehabilitated as desired by their statesmen, the next period of 5 years begins,-1924-1929. In this the dominant note seems to be that of measured progress forward. In consequence, Science has made vast strides. Industry has to be reorganized and rationalized; Commerce has to be redirected; Economic life as a whole has to be re-oriented. The result is that in this period

occur far more changes of a technological character than ever before in a corresponding period. The Price movements, though less marked, are not the less radical and significant. A single Lecture will barely suffice to analyse the complex phenomenon we call Rationalisation, and understand its consequences. In this period, moreover, the fundamental ideas relating to the social and economic life of the people seem to undergo a silent but significant change,—so complete, that its ideological aspect is no less interesting than its concrete expression. But one Lecture is all that can be devoted to this subject in this Series.

PERIOD OF DEPRESSION.

In the last period, from 1929-34, we have to study the World Depression. The factors which have brought about the Depression, in each of the several important countries of the world, and its consequences to mankind as a whole, are more or less similar. We have also to understand the nature and expression of this Depression, as well as of the remedies adopted in the several countries, or by the world in conference, with a view to attack the problem of Depression by conjoint effort. This Depression is still not ended, nor remedied. But we can not devote profitably more than one Lecture of this Series to understand its nature, analyse its causes, and estimate its consequences, if only the better to devise or appraise the remedies.

RUSSIAN EXPERIMENT.

Thus far the chronological order of the Lectures, I cannot, however, you will readily understand, strictly follow that order, not only because the leading phenomena of each period extend into the next following, and so the periods overlap ; but also because the two specific Experiments of Russia and the United States have a significance transcending the limitations of time. Between, therefore, the period of Re-organisation and that of Depression, I would insert a Lecture on the Communist Experiment of Russia. This experiment of Soviet Russia we may consider in several phases, during its period of Revolution (1917-1923), during its effort at rehabilitation in 1923-1928, and during its latest activity symbolised by its so-called Five Years' Plans. We cannot treat Russia any longer as an isolated phenomenon, which has no contact or bearing upon the world as a whole. Not only has Russia been recognized for political as well as

economic inter-course by the world as a whole.* The reaction of the Russian methods and ideas is having an increasing force in almost every important country in the world. Hence, when those methods and devices may find an expression, suited, of course, to the peculiar requirements of each country in other parts of the world, we cannot say. In this state of affairs, it would, you will agree, be unwise to overlook that Experiment, and its formidable impact and reaction on our economic life; and so I propose to devote, without further apology, at least one of the succeeding Lectures to an examination of the developments in Soviet Russia, and their reaction on the local economy of other countries, as well as on economic inter-course between the nations of the world.

AMERICAN EXPERIMENT.

The same may be said of the recent Experiment in industrial re-construction and economic regeneration, in currency regulation and commercial orientation, in the United States of America. Though not so radically different in its basic conception, the American Experiment is no less striking than the Russian; while the trend of its developments offers as many possibilities of a complete revolution in our economic ideas and organization as the Russian. The reason is quite simple. The American Experiment is more orthodox; it offers less of a break with our prevailing system; it speaks in terms familiar to, and even approved by, the existing order in capitalistic and commercialized countries. But, because of all these, its possibilities for a silent revolution are not the less formidable, or less likely. I need, therefore, offer no further excuse to devote another Lecture to an analysis of the American situation, and an explanation and appreciation of the Roosevelt programme.

These explain nine of the following Lectures. The concluding lecture of the series will concern itself with an appraisal of the new forces of economic nationalism, which have become in recent years quite prominent, and painful symptoms of our prevailing malaise, and a summary of the conclusions reached in the course of the Lectures.

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* It was recognised for purposes of diplomatic inter-course by the United States in July 1934, and was admitted to the League of Nations in the September following. It can now no longer be regarded as a pariah among nations.

Nationalism was, until now, more a political than an economic phenomenon. But politics and economics are notoriously impossible to keep mutually apart and uninfluencing. We may, indeed, brand economic arguments as "politics," when they do not fall in with our own ideas. But that will not avoid national policies and international relations being influenced more and more by economic factors and considerations. Certainly, the phenomenon of a militant and aggressive Economic Nationalism has attained such dimensions, and colours so deeply a number of modern movements or tendencies,—whether in Nazi Germany, Fascist Italy, or even Communist Russia, not to speak of Protectionist Britain or Inflationist America,—that we cannot omit consideration of this phenomenon from this Series of Lectures. The last lecture of the series, therefore, I shall devote to an understanding of general lessons of all the events and tendencies of the last 15 years-lessons, I mean, symbolized by the price changes during that period, in order to see whether we can utilize these lessons for the future. The basic issue, whether a stability in prices is in itself desirable for all times, will likewise be considered in that part of the subject ; whether it is possible and beneficial to have a changeless economic system, or whether we must recognise the inevitability of change and movement as a sign of life and health ; whether we can regulate or control these changes and movements, in Time as well as in Degree, in accordance with a planned system of economy, functioning in each community as a self-contained unit, itself a co-ordinate part of the world-economy as a whole. Prices must, I need not repeat, be regarded only as an index of economic forces or movements, and may corelate with the whole scheme of modern economic life. The index, I need not conceal it from you, is a faulty and defective one ; but, such as it is, we must utilise it for a proper appreciation of the basic forces and dominating tendencies of our age, as I propose to do in these Lectures.

Before concluding for the evening, I may point out where and how the reaction of these movements and developments in India will be placed in this series. Almost the last communication I had from the late Prof. Chhablani on this matter mentioned the desirability of the Lectures in this Series having a direct bearing upon India and her problems. Though the subject I have chosen for this Series is of world importance, it is, of course, not without its interest to, or reaction upon, India. In fact

the period is conspicuous in this country, almost as much as in any other, not only for large and profound price changes, but also for numerous devices and experiments,—economic as well as financial,---adopted to keep these changes within more manageable terms. It was open to me to devote an entire Lecture to these movements, and the remedial or reconstructive measures in India. I feared, however, that by such a process we may lose sight of the true perspective and just proportion of what are, after all, world forces and phenomena, what is in reality a world problem, much as it is the problem of every constituent community. If we were to study this problem as it presents itself in each of the leading countries of the world, we may succeed, perhaps, in emphasising the special circumstances or the peculiar conditions of each country studied; but we are almost sure to lose sight of the problem as a single whole. By such a treatment we may quite likely lose the lesson of the whole complex problem. The problem is a world problem, even though its solution in each country may vary according to the circumstances of that country. So far as our study is a scientific investigation, we must lay emphasis, rather on the world than on the local aspect of the question,---though, of course, the latter should not be completely ignored. I am, accordingly, going to analysis the situation to you in its broad general outlines, in each of the main phenomenon or motive forces considered, pointing out, in each instance, the particular reaction of that phenomenon in the principal countries, without omitting our own. We shall, I think, get by that method a truer picture of the nation, than by the converse method of considering the problem in each country by itself and separately.

LECTURE II.

World Conditions at the End of the War.

Before we consider in detail the Price Movements during the last 15 years, it is necessary to realise the background on which these changes have been occurring. As you must be all aware, the War had made radical changes in the organisation of industry and trade throughout the world, and had consequently resulted in price changes of a most unprecedented character. The struggle lasted for over four years. During its course, it had involved practically the whole civilised world of modern commerce and industry, either as Belligerents, or as Neutrals with sympathies on either side. Its effects may not be identical in each of these two groups of countries; but they are sufficiently similar to admit of a general view.

Belligerent countries.

(*i*)—In countries actually at war, the struggle had diverted the flower of manhood from productive occupation, whether directly as combatants engaged in killing or maiming one another, or as those numerous forms of auxiliaries and ancillaries, who were accessory to that wholesale murder and organised slaughter which we call war. These latter consisted of Munitions and Transport Workers, Doctors and Nurses; clerical and hospital attendents; propaganda and advertisement units; and a host of other occupations connected with or ancillary to a war. This destructive process employed the whole adult population, men and women, in the belligerent countries. In countries, which, like France or Germany, were organised for war even before it broke out, where Conscription was the basis of national defence organisation, the diversion of men and material, due to the War directly, was not so sudden and considerable—at least the dislocation caused in the normal economic life of the community by the war was not so shattering in such countries,—as it was in those other countries, which, like Britain or the United States, were primarily organised for peaceful industry, and had no system of military or industrial conscription. They, therefore, were peculiarly handicapped, because of the very necessity for effecting a diversion of their man-power and material resources.

In either case, however, the diversion on such a scale of the man-power from the normal productive occupation to the process and frenzy of destruction is the *first feature* I would like you to notice in this back-ground of the drama I am about to lay before you. The moral and psychological effect of such a wholesale diversion of adult human beings into a continued period of idleness, or blind frenzy of destruction, may be traced in such war-time master-pieces of Literature as "*Sergeant Gritscha*" or "*All Quiet on the Western front.*" The economic significance of that diversion and distortion still awaits the pen of a Wells or a Barbusse, to make you realise the harm that has been wrought by the war. For my present purpose, it is enough to note that this enforced and unmeaning condemnation to a life of brutality and destruction made a subtle change in man's sense of relative values, in his outlook on present worth as contrasted with future, in his conception of social and personal rights. This afffected, fundamentally though imperceptibly, the economic organisation and action in the Post-war period. Being exposed to a daily risk of loss of life or limb; and being fed on tales of glory and heroism in the deeds of destruction, the war-worn adult was psychologically unfit for social and economic work, even when he was not physically incapacitated from it. For social and economic work is necessarily not of immediate benefit. Constructive effort requires patience, and a degree of altruism, planning and building and working for others, in return for a fraction of the value one's work may be said to have produced, that the war withered veteran was incapable of displaying, through sheer cynicism. While the supply of material utilities was thus substantially affected by this demoralisation, the demand for them continued the same, if not more intensive than before. What was gained by inventions on the supply side and by the loss of men on the field of battle reducing demand, was more than counter-balanced by the increased intensity of demand by the survivors. Price movements were thus bound to be radically affected. I cannot pause to glance at the reaction of such a mentality on human relations, social responsibilities, political institutions. Economic activity has, however, not even yet recovered from the shock administered to the human organism and social mechanism by the war. Economic equilibrium displaced by the war has not yet been readjusted; and it may be doubted if it ever will be in the pre-war sense. We must, therefore, examine the nature and extent of this shock in some detail.

(*ii*)—The Belligerent countries were, likewise, obliged to effect a very substantial diversion of their trade and industry, a forced re-orientation of their entire national economy, which was equally due to the exigencies of the War. Change of this dimension in a modern economic society must inevitably react upon Prices, and on the entire economic system of which prices are an expression, or a measure. The diversion of industry caused directly by the war has already been mentioned in passing in the last Lecture. I need not, therefore, repeat it here, beyond recalling that all industry, not directly connected with the war, had to be relegated to a secondary place. Every effort had to be concentrated on the production of war-material regardless of cost, and often regardless of efficiency. Mass production, and universal Standardisation, thus became a feature of the world economic system, that had its own influence on the course of prices in the age that followed. Because of the urgency of war demands, particularly for food and munitions, resources had to be pressed into service, and methods of production adopted, which, before the war, would have been thought utterly unsuitable. In England, park-land and hunting preserves were ordered to be brought under the plough for wheat cultivation ; and Government factories were established to speed up munitions production, and to prevent the enormous profiteering which went on shamelessly in private factories.*

(*iii*)—The War, moreover, became, as it developed, a struggle of attrition. It was soon evident that it was not to be decided by actual strength of arms, but rather by a process of exhaustion, operating on all sides equally, and leaving its legacy of destruction and desolation, apart from the human misery and losses it entailed all over the world. Because it became, in its later stages, a struggle for

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* As samples of overcharging and profiteering by Armament Firms in War time, the following examples given by a British Minister of Munitions (Dr. Addison) would be interesting reading :—

Process.	Original Price.	Price after investigation.
Filling Fuses (100)	£ 1-4-0	0-12-0
,, 4·5 lyddite Shells (100)	£ 18-16-8	7-18-4

"The capital cost of the six T.N.T. factories was £ 1,473,000, but, by April 1917, they had already produced T.N.T., which, as against

(Foot-note continued on next page.)

attrition, the warring nations had to live on their past reserves, built up out of the surplus wealth created in the preceding half century. In the principal combatant communities,—Britain, France, Germany,—this surplus wealth and reserves had taken the form of investments of Capital abroad ; while in some, the local plant and equipment for their economic organisation had also been provided with some reserves in the form of productive machinery directly needed for the war. But the process of attrition just mentioned strained and used up the local reserves, while foreign investments had either to be pledged to obtain the wherewithal of fighting, or converted into cash for the same reason. European reserves, or investments in America were particularly depleted and converted* by this process, so that this pre-war debtor nation was, at the end of the war, transformed into a creditor nation.

(*iv*)—The necessity of offence as well as defence had given a spurt to inventiveness, and organisation on the most scientific lines, which also had its reaction on the economic system at the end of the War. The aid of science in

contract prices, had given a surplus of £ 2,404,318. They had, therefore, completely wiped out their total cost of provision, and had left a balance over of 38 per cent " *Bloody Traffic,* by Fenner Brockway, p. 175-6.

Mr. Lloyd George, Prime Minister of the United Kingdom, speaking in August 1919 in the House of Commons, on the work of the Ministry of Munitions and the savings effected by it, mentioned the case of Lewis guns, which were charged for by Armament Firms at £. 165 *before* investigations were carried out by the Ministry in the cost of the article, and the price of which reduced to £ 35 *after* such investigation had revealed the enormous profiteering practised. He added "Through the costing system and the checking of the national factories we set up, before the end of the war there was a saving of £. 440,000,000."

* Practically all the American investments of British citizens were mobilised by 1916, and held by Government to maintain Anglo-American Exchange. These investments totalled some £ 1,000 million, while the average adverse balance of trade against Britain was £ 350 million per annum—a 3 years' provision at most. Had America not come into the War on the side of the Allies by 1917, even British reserves would not have sufficed to keep up British credit. The total foreign Investments of Britain before the war were estimated at £ 4,000 million in round terms: while those of France, which came next were estimated at £ 2,500 million. Germany a new entrant in the race, was believed to have not more than £ 1,000 million worth of such foreign Investment. That position has been completely reversed since the war in America and Germany.

man's productive machinery was fully economised and freely utilised, at first, of course, in the production of the munitions of war and the engines of destruction--like submarines, airoplanes, poison gases. But the analogy inevitably extended itself to the production of food-stuffs, raw-materials, and even the manufactures of peace time requirement. This, however, is noticeable most prominently in our II period; and I shall, therefore, reserve its discussion to the Lecture devoted to that period.

II—NEUTRAL COUNTRIES.

The tale is slightly different in non-belligerent countries. As I have already remarked, however, there were not many non-belligerents left towards the end of the War. In these countries, also, man-power and industrial organisation had to be diverted in response to the urgent demand for food-stuffs and war-material created by the War. The new impetus thus given to their industry, the adventitious protection thus offered their productive system, was used, under capitalist individualism, not always wisely, and seldom well. New Industries were built up, or old ones advanced, which were ministering to the war. They were not necessarily those which were really suited to the special circumstances and natural resources of the country concerned. India could have built up her sugar, her steel, her tea, her mineral or power-industry, thanks to the protection afforded by the war. But, instead, she concentrated on cotton and jute, on food-stuffs and raw-materials, which were needed for the belligerents.* The profits even of those industries, that got such unexpected protection, were not used in building up substantial reserves to serve against the day when this adventitious protection could be had no more, but were dissipated in high dividends, and wasted by the dividend recipients in wild-cat schemes of expansion.

In those countries, however, where national foresight and business acumen were not wanting, they built up new Industries, and created new reserves in the shape of buying

* India was herself a belligerent, in so far as she was part of the British Empire, and that State was a belligerent. Our concern, however, in the war was forced, indirect, or remote; and so I have included mention of India in this category. Economically India was, during the war, more akin to neutrals than to belligerents, though juridically she was, of course, part of a Belligerent empire.

up their own old debts held abroad. They did so most prominently in the United States, while that country was still neutral. The capture of the markets, once monopolised by the more developed Belligerents; the re-orientation of their productive organisation to meet the new demand; and the building up of services, accessory and indispensable to a strong position in International Trade in normal times, *viz.*, foreign Exchange Banking, Shipping and Insurance, were all ambitions that came soon in the wake of these new opportunities. Their fruition has affected materially the world economic system, and its Price index in the Post-War age. But while, however, the war continued, and an intensive propaganda on account of the need to prosecute the struggle was carried on, all these consequences of such a struggle, all these reactions of such a process of exhaustion, were not perceived. In fact, the war seemed to be a time of prosperity, not only in the countries not directly affected by the struggle, but even in the Belligerents themselves, where destruction of human and material wealth on a colossal scale was a daily phenomenon for 4 years. Apart from the mistaken notions of martial glory, those actively engaged in warfare were undoubtedly exposed to risk of death or maiming, with consequent loss in energy and efficiency to their own country. But that the community concerned did not perceive to its fullest extent. The reasons are :—

(*i*)—While the war lasted, an abundant, though unnatural and temporary, employment was created by the intensive demand for all the requisites of war, such as munitions and food-stuffs, and by the services incidental to the prosecution of the war.

(*ii*)—The benefit of this additional employment for capital and labour was not always conserved as it might have been. The working classes used up their new resources in a substantial amelioration in their standard of living, which, in the eyes of the classes above them, reflected a criminal waste; but which the workers conceived to be the irreducible minimum of what was due to them as civilised human beings, with claims to an enjoyment of life, and appreciation of its beauties, which had hitherto been monopolised by the employing classes as their exclusive privilege. On the other hand, the latter used up their increased earnings or profits in an orgy of waste and extravagance, which boded ill for the economic life of the post-war world. There

was also the factor of reckless public borrowing, and wholesale currency inflation, which lent a hectic touch of prosperity, and concealed the yawning chasm beneath them, while the war lasted. Prices were soaring like rockets, and everybody seemed to be making money, which thus was a most inopportune time to consider the hard realities of the economic situation.

(*iii*)—The cost of production had thus come to be insensibly, though substantially, increased, in so far as the worker's wage and the price of raw-materials are ingredients of that cost. The possibility of a high profit level, common in war-time, was bound to be minimised in the post-war period when competition was resumed with redoubled fury. The *Price-level* was rising all through the war in every commercial country of the world, mainly in sympathy with the rising price of war-materials; but partly also because of the rise in the cost of production. The increasing demand arising out of an allround betterment also brought about an appreciable degree of price appreciation.

(*iv*)—The control, moreover, that every belligerent nation had to exercise, in its own self-interest, over the labour forces of that community, in respect of the regulation of employment and wages, had prevented a clearer perception being formed of the illusive prosperity engendered by the war. During the war, it was never realised that Labour would not remain always content with even the war standard of living, however high it might be. Nor was it perceived that the close regulation of the wage-rates, which could be tolerated in war-time, would not be suffered when peace returned. In neutral countries, even the spectacle of human loss and misery was wanting to restrain the relentless pursuit of material prosperity through the manufacture of munitions and supply of food-stuffs.

While the Belligerents, therefore, had diverted their labour to war-time industries, they found their own resources insufficient for the tremendous requirements of the world-war; and had, therefore, to fall back upon the more considerable of the neutral countries to obtain their war material, to make good their deficit in their munitions, to procure the balance of their food-stuffs and raw-materials. This intensive demand for the chief produce of the neutral countries occasioned a sharp rise in prices as the war

progressed, and brought about a change of trend which we shall consider hereafter more fully in these lectures.

The war-time prosperity was reflected primarily in the rise in prices and wages,* as shown in the foot-note.

The conditions in other Belligerent countries were not materially different, though the rise in prices may not have been of the same degree, or in the same articles. A system of rationing all the essential articles, and of price-control, went a long way to prevent price-inflation, or allow its being greater than it actually was.

(*iii*)—Under these conditions it is easily intelligible that there should have been no effective check or regular control of prices. The necessity to preserve national existence had prevented too close a scrutiny on the spending departments, being maintained in the Belligerent countries, especially for obtaining war-time necessaries and services. Money was, therefore, no consideration in obtaining what were considered to be indispensable requisites for prosecuting the struggle. As much of this money was obtained by the Governments concerned, either from loans, or even from the still easier process of watering the currency,

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* The rise in prices in India, the United Kingdom, the United States and Japan during the war-years is reflected in the following statistics. (The U. K. figures are those of the Statist Price Index; those of India, of the Calcutta Index. This is lower in these years than the Bombay Labour Gazette Index.)

INDIA. (1913-14=100)		Japan.	U. K. Food.	U. K. Material.	U. K. Total.	United States Bureau of Labour Index. Whole Sale Prices.	United States Bureau of Labour Index. Cost of Living.	United States Bureau of Labour Index. General price level.
1913	100	97	77	68	85	100	100	100
1914	,,	117	81	88	108	98	103	100
1915	112	149	107	108	136	101	105	103
1916	128	196	130	140	175	127	118	117
1917	145	236	169	179	190	177	142	139
1918	178	259	174	206	206	194	174	157
1919	196	200	185	222	251	206	199	173

The Board of Trade has issued, since 1921, an Index Number more widely based on more recent material. Equated to 1913, the wholesale price Index of the Board of Trade showed a price level in 1920 of 308, while the Statist showed it at 295.

it was impossible to exercise that rigid watch and scrutiny over the spending Departments, in countries engaged in what appeared to be a life-and-death struggle, which in normal times is an integral part of efficient public administration.* Vast stores of munitions and food-stuffs and raw-material were purchased by the Belligerent countries irrespective of costs, and also because of secret profiteering connived at by people in high places; for they did not know when the War would end.†

It is interesting to note, in this connection, that the bulk of the war expenditure was financed out of such borrowed money in almost every belligerent country, or by the inflation of the currency systems. Even in the United Kingdom or the United States, where traditions of sound finance are much more stringent and of longer standing than in other countries, loans paid for more than two-thirds of the war expenditure, while increased taxation hardly accounted for perhaps a third of the total money spent directly upon the war.* The strong credit

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* Britain, whose national finance has always followed the most conservative lines, added about £7,000 million to her national debt during the war; while she spent not more than £ 3,000 million in all the four odd years of the war out of current revenues. The proportion of borrowed monies paying for the war was much greater in France and Germany; and so inflation of credit and currency inevitable in these countries. Their reflection in a rise in prices was equally unavoidable.

The ordinary Revenues of Germany of about £.125 million were expanded in 1918-19, the last year of the war, to £ 366.7 million. On March 31, 1910 the debt was less than 5,000 million Marks or £.200 million. By 1915 it had risen to £ 500 million; on March 31, 1919, the total funded debt of Germany was 92,396·4 million marks. In addition there were Treasury Bills free of interest worth 63,696 million marks. At the pre-war par of exchange this would be equal to £8,000 million of debt. On March 1, 1921, the total debt amounted to 300,000 million marks or double that of 2 years before.

In France, the total revenue receipts were about £ 200 million in 1913. By the end of the war, Revenue was raised to 21,770·2 million francs (1920) equal, at pre-war par of exchange, to some £865 million. The French national debt grew from £1,367 million on July 31, 1914, to £5,898 million on January 1, 1919, and on September 30, 1920 at 285,833 million francs, equal, at pre-war par of exchange, to £ 11,433·3 million or 9 times as much.

† Instances of War-time profiteering through needless purchases at inflated prices, sold off at the end of the War as scrap, are to be found

(Foot-note continued on next page.)

position of these countries, and their immense resources, easily obtained these loans abroad, when their own resources were exhausted, which saved them the need to water the currency unduly, and so inflate still further the prices. In other countries, the reliance upon borrowed money was much more considerable. This policy transferred the greater portion of the war-burden from the generation which waged it to the generations that followed. It was considered just and proper that, while the war-generation paid for it in loss of life and limb, the following generation should bear a portion of the burden, as it was hoped the war would result in permanent benefits to mankind. But, if the bulk of this war-borrowing was made abroad, it would not result merely in a transfer of purchasing power from one section of the community to another. It would mean transfer of goods and services, at perhaps radically differing prices, which might materially affect the entire local economy of the borrowing country. But all this was wholly ignored. That the results of the war were by no means so beneficial as expected; and that the future generations may not regard the War to have been waged for their benefit, was wholly overlooked. The argument, moreover, that borrowing only transferred the purchasing-power of one section of the community to another, though very much emphasised in the war years, also overlooked the complication due to foreign borrowing, and the absence of the wherewithal for making the payments in respect of Debt in after years. And all that is quite apart from any changes in the common measure of value. Prices may

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in every country. Here is a specimen. In the United States, Airplanes costing the Government \$. 20,000,000 were resold to Curtiss Factory at the end of the War for \$. 2,700,000, or at about 1/7 of the cost. Thousands of American aviators were compelled to buy at full price from the Curtiss Company, if they wanted these machines. That is to say, the Company made their 1st profit by selling originally to Government the Airplanes for 20 million Dollars; then they repurchased at less than a seventh of their price to Government; and resold to the public the same machines at the full original price, (See War Policies Commission Hearings. P. 786). War-time contracts, placed in India at such inflated prices, with bribery and corruption playing their role at the highest in such deals, resulted in at least one threatened prosecution of a prominent Railway official in India, which was frustrated by the suicide of the accused while awaiting trial. Far more numerous cases of this kind must have occurred than the public knows of; but the forced resignation of a member of the Government of India would—were all the facts revealed—give the public some inkling of the demoralisation that had spread even in the highest officers of the public service.

not be the same at the time of making repayment of borrowed money, or even for paying interest thereon, as they were when the Debt was incurred. This complication, though staring the war-time financiers all the time in the face, was wholly ignored. When borrowing at home directly failed, and no loans were available abroad, they resorted to the easy device of creating money by the use of the printing press, by reducing the reserve provisions of their Central Banks, or substituting government securities for gold in the reserve. All this materially helped to raise the price level.

B—REORGANISATION OF INDUSTRY.

The dislocation of industry, or of the productive organization, caused by the war, was, though not exclusively confined to warring nations, occasioned mainly by the requirements of war-time: the manufacture of munitions, the provision of armaments, the supply of food-stuffs. Some new industries were also called into being about this time, and were rapidly advanced because of the necessities of prosecuting the war. Such advances, as the industry relating to aircraft and Aeronautics in general ; or communication by wireless ; or the protection against the submarines ; or the invention of substitutes for such articles of food and raw-material as were cut off from the belligerent countries, were, no doubt, all primarily advanced because of the war-time necessity. But they have, at the same time, their utility in normal peace-times. Once these industries have been established in any country, they cannot but occasion considerable diversion of capital and labour. This, in its turn, is bound to react upon the general economic system of the community so affected.

There were, moreover, other developments also during this time, which had their reflection upon the general economic system of the world as a whole, which have been perceived much more clearly in more recent times. The progress of Mechanisation, and the better organization of mass-production in the supply of manufactured goods as well as transport accessories, may be said, not unjustly, to have given birth to that Technological Revolution in Agriculture, Industry, Trade, and Transport of to-day, which accounts in no small measure for the depression in production and prices that we notice in the succeeding period. In fact, for the changes in the better organization and more

efficient management under war-time necessity by public departments, and under Government control,—and for the regulation of output and prices in the industries immediately required for prosecuting the war, we are directly indebted to the last world-war. The war has made the leaders of industry and commerce in the world realise the necessity of scientific management, systematic organisation, and co-ordination, which, in business and industry, result in substantial economies in the cost of production, and therefore react radically upon prices as a whole. From this perception of the need for scientific management and systematic organization and co-ordination, the step to a wholly planned national economy, in which prices and profits, wages and output, trade and exchange, would all be carefully regulated and controlled as from a common centre, and operate as under a common impulse and for a common end, is neither very long, nor very difficult. Though the years immediately following the war did indicate a desire to revert to the pre-war anarchy of individualism, their experience of the last few years in many countries of the world has made an ever widening circle of mankind recognise the need for careful planning and scientific organisation.

The same factors were at work, though from a different direction, in those days, in regard to rationing of production as well as of consumption. Government control of industry, and their anxiety to husband all supplies of food-stuffs and raw-material; and the evolution of a rigid system of cost accounting, had necessitated such a rigid course of rationing, that the idea of carefully designing, or planning the entire economic system, both on the side of production and on the side of consumption, may be said to have taken its birth during this time. For the sake of the war, the prevention of waste in materials was of the utmost necessity; while the saving in the labour force, so as to make one unit of labour serve twice or three times or even more, than would be the case without such a plan for saving labour, was necessitated by these very developments. Never was time so rich and fruitful in ideas and inventions of new processes, new material, new methods of carrying on the economic life of mankind. Its result was inevitably a legacy of inventive genius, which, though kept back for a while, has of late been asserting itself in new economies and devices, that account in no small degree for the present Depression. The combined result

of all these controls and regulations was, not, indeed, so much the effective control of Prices, and the maintenance of their stability, as had been originally intended, but rather the birth of a system of planning that had hitherto not been thought of.

Because of these activities and alterations, the other industries and commerce, not primarily required for warlike operations, were neglected. Plant and machinery engaged in these other industries were allowed to fall into obsolescence or disrepair. No provision was made for their renewal or replacement of worn-out parts; and much less was the normal progress in these industries maintained. Labour was also diverted from these industries, as already observed. A *hiatus* was consequently created in the general economic organization of the principal countries of the world, which could not but leave its mark upon the economic life as a whole. Not only was the skilled and unskilled labour diverted from the normal peace time industries, but also the management of these industries suffered considerably in efficiency. The reason was obvious. The industries that commanded the highest profits, or paid the biggest wages, and, therefore, attracted the most efficient management, were naturally those directly connected with the war. Relatively inferior ability was, therefore, left to look after these other industries. The demoralisation, generally characteristic of war-time work, particularly because of comparative indifference to considerations of monetary costs, as also because of laxity of control and supervision, easily set in, and progressively led to the neglect of these industries that complicated the situation in a very high degree. For as the supply of products from these industries was reduced, their prices rose ; and the rise of prices in one case sympathetically reacted upon others ; so that an all-round inflation of prices was inevitable.

C.—TRADE DIVERSION.

Last, but not the least of these consequences of war-time activity in particular directions, to the neglect of others, affects the trade of the world. As must have been already evident to you from the preceding remarks, the nature as well as the contents of the world-trade were materially affected because of the demands of the war in belligerent countries. The old staples of trade, or the

principal imports and exports of the world, were radically altered in the countries directly engaged in warfare. The result was that the whole character of the trade of the neutral countries, such as there were left at the end of the war, came to be fundamentally altered. Largely because of the necessity of the war, politico-economic alliances were concluded by the Allies of the war, as also by their adversaries, whereby the raw-materials necessary for the conduct of European Industry were sought to be reserved, after the war had come to an end, and the markets of the world shared exclusively among these allies and associates.*

The markets were, in their turn, further affected, because, in the more backward countries, the war had afforded a special, intensive, adventitious protection to the local industry. The latter, during the four years of the war, and because of this protection, rose to such proportions, that, at the end of the war, the European industrial countries, notably the United Kingdom and Germany, were faced with the most serious competition in what hitherto had been regarded as assured markets for the manufactures of these countries, in exchange for the raw-materials and food-stuffs produced in these markets for European wares.

A particularly important factor in this connection was the submarine warfare, which practically cut off large slices of the world's markets from one another, the sources of raw-material from the places where these materials were commonly manufactured into finished goods, and the food-stuffs from their ultimate consumers. For a considerable period, again, during war-time, the central European Powers were blockaded by the allied fleets, and trade with those countries was, therefore, rendered impossible. Cut off from their raw-materials and from their sources of food supply, whether by the Submarine warfare or by the blockade, these European countries, and notably Germany, were reduced to devising or inventing substitutes for their raw-materials and food-stuffs, which may have temporarily given rise to new industries in those countries, but which in reality spelt a complete dis-

* The Paris Economic Conference between Britain and France in 1915-16 provides an excellent illustration of this theme.

organization of the world's economic system as it had existed and developed before the war.

D.—EXCHANGE CONTROL.

As if the situation thus outlined was not sufficiently complicated, further difficulties were introduced by the operations of warring and neutral Governments in the world's Capital markets, as also their attempts at regulating the Exchange value of their currencies, and thereby maintaining a nominal equilibrium between the prices within these countries and the international prices of the same materials. I have already referred to the disastrous effect of war-time borrowing, and the use of the printing press for turning out inconvertible paper money in adding to the volume of money already in circulation. These tendencies were, however, sought to be controlled by pegging exchanges, and maintaining artificially a fixed rate of exchange in spite of all the forces of the international balance of payments rendering such a maintenance all but impossible. The International Balance of Accounts was complicated, not only by heavy imports from abroad by the belligerent countries, with little or no exports to set off against such imports, with no services to pay for these imports, with rapidly disappearing foreign Investments of capital by those pre-war capital-exporting countries of the world, and with stringent prohibitions on the export of precious metals to pay for the balance, but also by heavy international borrowing.

Under these circumstances, a certain rise in prices was inevitable. When the war came to an end, this elaborate mechanism of control and regulation of industry and labour, commerce and exchanges, was suddenly thrown out of gear. Foreign Exchanges were the first to be left to adjust themselves, mainly according to the purchasing power parities of the local currencies; the freedom of industry and of labour from war-time control followed as a matter of course. And so the contrast between pre-war and post-war prices, gold and paper prices, local and international prices, began to make increasing demands upon public attention, in the very first years of the post-war period.

E—POLITICAL COMPLICATIONS.

On the Economic situation thus complicated, came further complications of a political nature, which had their inevitable and profound reaction on the economic position, and its index, the price level. The Treaties of Peace, signed at Versailles and Trianon, not only imposed an impossible burden of Reparations on Germany, but set up new countries, like Poland and Czecho-Slovakia; dismembered old units, like Austria; and created new ambitions, which could not but affect vitally the post-war economic life of the world. The Reparations demand from Germany was not only excessive, and, therefore, impossible, in the aggregate; it was absurd in the manner in which it was arranged to be met, if the letter of the Treaty of Versailles was to be observed. To make a proud and sensitive people, like the Germans, accept, at the point of the bayonet, that the entire guilt of the world war was theirs; and to make them, on such a false basis, assume liability for making adequate Reparation for all the destruction and damage in their enemy countries wrought by the operations of the war, was to sow the seeds of that revenge, which is now bearing fruit in the growth of the Nazi movement in that afflicted country. No German Government, since the war came to an end, has ever admitted that the war-guilt was entirely theirs; no representative German has ever accepted that Germany was bound to make reparations, on the scale and the manner provided for in the Treaty of Versailles; no impartial outside critic has ever recognised that the Treaty provisions were either just, reasonable, or likely to heel the wounds left gaping by the war between these two neighbouring peoples in Europe; no practical and far-sighted statesman has ever believed that such Reparations could ever be paid without throwing completely out of gear the entire mechanism of world-trade and exchanges.

But even if we were to accept that the German people were justly punished by means of the Reparation clauses of the Treaty of Versailles, we must recognise that the repercussions of any attempt to carry out the provisions of Versailles would be to disorganise world trade, and destroy the money economy, which had been established in its completeness after the Industrial Revolution of the last two centuries. Germany could not make Reparations, unless her produce—her surplus produce not wanted at home—found

purchasers in the world markets. But purchases by other countries of German goods in that volume could not but affect injuriously the trade as well as the industry of the principal commercial rivals of Germany, like Britain. To any one, therefore, who gave more than a merely superficial attention to these provisions of the Treaty, it must have been evident that, in its working, the Treaty must destroy, either the commerce of Britain and France, or its own provisions. Germany, moreover, could not capture these world-markets, except by such economies in her industrial production, and consequently such reduction in the international Prices, as would undermine completely the prevailing economic organisation of society. For prices are the index and the measure, the cement and the bond, of the whole economic structure in a commercial and capitalistic society, where production is almost entirely for exchange, and where value has no recognition except in so far as it could be expressed in terms of a money price.

This was the ultimate danger of a Germany, able and willing to make Reparations, as provided in the Treaty of Versailles. But, even if she were willing to shoulder and carry this burden, she could not do so while the effects of the war were heavy upon herself. She was exhausted, in men and material, almost as much as any of her neighbours and former antagonists, even though her army and navy could claim as their motto : "Unbeaten on Land or Sea." Germany must have breathing space; Germany must have means to resuscitate her industry, to rebuild her productive organisation, so as to produce the surplus from which the Reparations demand was eventually to be met. For this she must have capital; and as she had no capital at home, she must borrow abroad. On the other hand, her creditors in respect of these Reparations, professing to trust to the receipt of the Reparations to restore their own wasted regions, and to make good the war-losses within their own territories,—France and Belgium could be safely instanced in this category,—they too must borrow at home and abroad to tide over the intervening period. If Germany did not pay, it was questionable if their own resources, even from a restored economy, would suffice to bear the burden of these new post-war Debts, in addition to the war Debts already piled up in immense quantities. Here, then, is another source of future trouble. International borrowing on a large scale was *inevitable* and yet inadvisable, at a time when the world price-level

was phenomenally high due to the effects of the war and the inflation of local currencies. For, the burden of this borrowing would be progressively growing, as the effects of the war were liquidated, and normal economy restored. But this, too, was not perceived by any of the statesmen busy with settling the fate of the world at Versailles.

Germany's capacity to bear the charges of her own maintenance; her ability to make those necessary economies in her productive organisation, which would be indispensable if she were to make the Reparations, was considerably curtailed by the sacrifice of her Colonies, and by those other provisions of the Treaty, which precluded her from making even an Economic union with her next of kin, Austria. France was so morbidly afraid of Germany rising like a Phoenix from her own ashes by new alliances, and reviving by new economies or inventions, that she took every precaution to forestall such possibilities, and prevent the consummation of such ambitions in the German breast. The inevitable consequence of that policy was, however, an increased disability on Germany, that could not but militate against that country fulfilling the terms of the Treaty.

Apart from Germany, the new countries created, like Poland, Czecho-Slovakia, Yugoslavia, etc., had not only memories of hatred against Germany and Austria, that had, previous to the war, exploited and oppressed them; but which were bound to nurse nationalistic ambitions, that could not but place additional impediments in the way of the world's post-war trade revival. The rise of European Nationalism was no new, post-war phenomenon; but the political groupings and combinations of the pre-war regime had concealed, or neutralised, the worst possibilities of intensive nationalism. Since the war, however, and because of the legacy specifically left to the newly made communities by the War, the forces of Nationalism were stripped of every pretence at seeking through world trade their just and legitimate benefit for each community. The newer communities had, by the very law of their being, to make inroads upon what had hitherto been the close preserves of their pre-war masters. If they were to succeed in these inroads; or if they were to be able even to maintain their own, they must resort to a policy of exclusiveness, tariffs and trade barriers, subsidies and subventions to local industry and agriculture; exchange depreciation, and even insolvency, if they were at all to make good.

I deliberately leave out of account, in this connection, the influence of the new Bolshevic, communistic Russia, not only because I propose to devote a whole Lecture to review the possibilities of Russia under her present economic system, but also because it may well be questioned whether Russia might be considered a post-war product. But, even if one leaves out of the present tale the reaction of Russia, one cannot deny that the Russian Experiment had undoubtedly a most far-reaching reaction upon the rest of the world, and Europe in particular.

In India, the war had brought about an increase of Exports and a fall of Imports, mainly for the general reasons already outlined, which seemed to transform India's whole economic system.* Prices of Indian produce rose by leaps and bounds† not only because of the heavy demand for that material, but also because of the shortage of currency†† that the Indian Government felt obliged to maintain in recognition of their pledge to keep the Rupee fixed at 16*d.* gold. But thanks to a steadily increasing balance of trade in favour of India, as mentioned already; thanks, still more, to the heavy disbursements the Government of India made in the war-years on account of the British Government in many a theatre of war nearer India; thanks to the heavy inflation, which, in spite of all the restrictions on Banks for financing foreign trade, had to be incurred‡ the demand for the Indian Rupee was so great that rupee-exchange could not but rise. Government admitted

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* India's trade balance in war-time.

	Imports	Exports	Balance
1913-14	191·30	249·00	57·70
1914-15	144·93	182·17	37·24
1915-16	138-17	199·48	61·31
1916-17	160·23	243·04	82·81
1917-18	164·35	244·89	80·53
1918-19	188·56	255·27	66·71

(in crores of Rupees.)

In addition to this trade balance in favour of India, there were following sums due to India on account of expenditure incurred for H. M. Government.

(Crores of Rupees)

1915-16	28·5
1916-17	57·7
1917-18	110·0
1918-19	120·0
1919-20	129·0
	445·2

(Foot-notes † and ‡ on next page.)

their inability to maintain the Rupee at 16*d.* gold by December, 1916, and went on raising the Exchange gradually through the remaining peiiod of the war, and even in the first year of the post-war period. This helped but slightly in keeping prices down, relatively speaking. The tendency was towards inflating ; prices continued to soar all through the period, and the economic system was affected materially by that phenomenon.

This, then, was the position when the war came to an end. The Trade of the world was disorganised, and industry dislocated. Labour was in the throes of demobilisation ; and Capital had been demoralised by the slipshod methods inevitable in a period of war. Exchanges were chaotic, currencies almost everywhere depreciated, and the devices adopted to prevent the worst consequences of such depreciation and dislocation only made the disease worse than the remedy. The task of restoration of the war-worn men and material ; and of reconstruction of the whole world, was so serious, that the most favourable conditions and circumstances of world-wide peace and all-round co-operation would have made it hardly feasible. Instead, there was hardly veiled antagonism, distrust, and deceit all over the so-called civilised world. Co-operation was conspicuous by its absence, and the philosophy of *Carpe Diem* was characterising, not only the individuals blased by the War, but whole communities, who had little hope of accomplishing their most cherished ambitions. It is on such a background that the drama I am going to sketch before you had its being. I shall commence it, in my next Lecture, by a sort of Prelude, analysing the laws of price-making, and the modes of its measurement.

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† While the Prices of Food-grains produced in India rose by 61% at the end of the War as compared to 1910, those of imported articles rose by 165% and of Indian exports by 57%

‡ The gross circulation of Currency notes rose during the world as follows; (in crores of Rupees).

31-3-1914	66·12
31-3-1915	61·63
31-3-1916	67·73
31-3-1917	86·38
31-3-1918	99·9
31-3-1919	153·46
31-3-1920	174·52

In addition there were large amounts of Rupees coined and added to the circulation, which also helped to raise the Prices c.p. Indian Currency, Exchange and Banking by the present writer.

LECTURE III.

THE LAWS OF PRICE-MAKING; AND THE FACTORRS GOVERNING PRICE-MOVEMENTS.

The subject matter of this series of Lectures is, as you know, the movements of prices during the last fifteen years. Having explained to you the historical background on which the drama unfolds itself, I propose, in this Lecture, to define the term Price, and explain to you the significance of that definition.

Much as economists are wont to complain of vagueness in the meanings attached to the principal terms of their science ; and much as the ordinary language impinges upon the scientific meanings given to these terms, it must be admitted that, in regard to this term—Prices—there is very little difference in opinion or meaning, though confusion may sometimes be caused by the different senses in which the expression may be used in popular speech.

Price is generally admitted to mean *consideration in money, given in exchange for a particular commodity or service.*

It is essential, for this definition, that a Price should be expresssd in terms of Money. Though the articles serving as Money may be different in different countries and at different times, it must be something serving as a common medium of exchange, which also acts as a measure of value in exchange for the particular commodities or services exchanged.

We shall consider the nature of this common medium of exchange and measure of value, as also the laws governing its relationship to commodities or services in general, in a moment. Here it is enough to note that a price is in every instance, the expression of a relationship, being expressed, definitely and concretely, as a measure of their relative values; and for the purpose of effecting an exchange between the commodities so proposed to be exchanged. This expression is in terms of one article which is called Money,, and which discharges this function in regard to all other commodities and services.

INDEX NUMBER OF WHOLESALE PRICES.

(Average 1913=100)

Year	United Kingdom Board of Trade.		United States Dept. of Labour	Canada Official	Australia Official.	South Africa Official.	Sweden.		Netherlands, Official	Switzerland Lorenz	Belgium, Official	France, Official	Italy, Bachi.	Japan, Bank of Japan.
	Old Series	New Series					Svensk Handels-tidning	Official						
1913	100	100	100	100	100	100	100	100	100	..	..	100	100	100
1914	100½	..	98	102	106	97	116	..	109	100	100	102	95	96
1915	123	..	101	110	147	107	145	..	146	..	..	140	133	97
1916	160	..	127	132	138	123	185	..	226	..	..	188	200	117
1917	209	..	177	179	153	141	244	..	276	..	..	262	306	149
1918	230	..	194	199	178	153	339	..	373	..	..	339	409	196
1919	255	..	206	209	189	165	330	..	304	..	..	356	366	236
1920	319	307	226	244	228	223	347	359	292	..	..	509	624	259
1921	..	197	147	172	175	160	..	222	182	191	366	345	578	200
1922	..	159	149	152	162	128	..	173	160	168	367	327	562	196
1923	..	159	154	153	179	127	..	163	151	181	497	419	575	199
1924	..	166	150	155	173	129	..	162	156	175	573	489	585	206
1925	..	159	158	160	169	128	..	161	155	162	558	555	689	202
1926	..	148	151	156	168	123	..	149	145	147	744	703	697	179
1927	..	141	147	151	167	124	..	146	148	146	615	618	574	174

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This *Price* must be distinguished from *Value*, before we go any further into the discussion of the laws of price-making. *Value, by itself, is the capacity of any article or service to satisfy a human need.* It is irrespective of a common measure, or even of an act of exchange. It is due to the inherent quality of that article or service, found by a given individual, not only in accordance with the physical characteristics or chemical properties of that article or service, but also in response to the need, the want, of the individual, his mental or physical condition, his spiritual or moral outlook, which makes him feel that want, and find its satisfaction in that given article. The subjective element is thus far more important in determining the *Value* of an article or service, than in the case of the *Price* of the same article or service, to the same individual. Whereas *Value* is thus essentially individual, *Price*, on the other hand, is as essentially social, or collective; whereas *Value* is correlated more to the inherent and natural qualities of the article, and is an expression of its capacity to satisfy human wants, as well as the personal needs of the individual finding a utility in the given article, and so placing a *Value* upon it, *Price*, on the other hand, is due to a large number of individuals demanding a large number of commodities or services at the same time, in exchange for a common medium of exchange measuring the relative utility of the articles *inter se*, and to the individuals demanding them. Whereas in *Value*, the conditions of supply of the commodity or service valued have little bearing in the concrete outward expression of that value, simply because these factors are imponderables; the conditions of supply in price-making have at least as great an importance as those of demand for the commodity or service in question.

Value may, therefore, be distinguished from *Price*, for the purpose of the discussion that follows, as **value in use**; while *Price* may be described, in contrast, as **value in exchange**, expressed and measured by some common medium of exchange which the person desiring such an article or service is prepared to pay. Note particularly, that whereas there can be, for the same article or service, at the same time, several different values to different individuals, there can be but one Price for the same article at the same time, if the Market effecting exchanges is properly organised.

This is not to say that in *Price* there is no element of utility to the individual; or, conversely, that in *Value* there

doubt, a much longer past; but it has been so generally and increasingly discarded, that it may safely be said to have no future, despite the efforts of the Roosevelt Administration to rehabilitate it as a basis of International Currency. Substitutes for gold, or its representatives, may, likewise, be found in every community. As a matter of fact, in the more advanced modern communities, for internal purposes no gold is used in the everyday transactions of local commerce. Its place is taken, for these local transactions, by a host of substitutes or representative forms of money, which are of varying validity as legal money, and of popular acceptance and currency. Coins of metals other than gold, silver, bronze, or copper, have not yet disappeared from circulation as gold has, for the simple reason that, in small payments and retail purchases, they are indispensable. Neverthless, their aggregate volume in general circulation is small, and falling rapidly with the introduction of paper money of smaller denomination. Paper money, on the other hand, in the shape of legal tender Bank Notes, or Government Currency Notes, or Certificates of Gold and Silver,—is of considerable importance still, merely because it is much more convenient than metallic money to handle and carry about.*

But Paper Money issued by a Government or a Government Bank, in its turn, is being increasingly replaced,—in the more advanced countries it has been all but excluded,—by Bank Money, consisting of Cheques and Trade Bills, and other such negotiable instruments, that

* For a total annual production of material goods in India, estimated at about 2,000 crores, India has, according to reliable estimates, about 350 crores of Rupees, and about 175 crores of Notes in circulation. Assuming that our national wealth changes hands at least 3 times before it is finally consumed,—a very modest assumption—the total of such internal commerce in material commodities alone would aggregate 6,000 crores of Rupees,—against which we have less than 500 crores worth of currency in actual circulation. The conclusion is obvious; either one Rupee does the work of ten, rapidity of circulation making up for limitation in quantity; or there are in use other forms of money, besides notes and coins, *e. g.*, cheques. Failing both these influences,—or their combined action proving inadequate,—the volume of transactions having to be effected being in excess of the volume of money necessary for such exchanges, there would be a general tendency to declining prices in conditions like India's. If the price-level is to respond automatically to the changes in the changing economic system, the currency and credit mechanism of a community will have to be made more elastic and self-acting than is the case in most countries to-day.

are commonly accepted in the business world as money, and which discharge the most important function of money efficiently and conveniently. Their use as Measure of Value is no doubt due to their being used as substitutes for Gold. Before the present World Depression,—and the consequent wide-spread abandonment of the Gold Standard,--these instruments were, in the last analysis, convertible on demand into Gold; and they consequently derived no small proportion of their importance as money from this feature. The fact that, in many countries, Acts of Government have invested many such substitutes for Money with all the legal characteristics of the actual (Gold) money, and made them unlimited Legal Tender for all purposes of internal commerce, must not be held to obscure the basic consideration which gives real value and general currency to representative and substitute forms of money, *viz.*, their being ultimately convertible into Gold. Even the strength of the Government fiat,—making given forms of representative money inconvertible, and yet legal tender to an unlimited extent,—is derived, in the last analysis, from the belief that Government authority rests upon national credit; national credit rests, similarly, upon each country's material wealth, actual, or potential; and that, therefore, these forms of money have their validity ultimately because of the faith its citizens place in the credit of their national Government; *i.e.*, in the potentiality of their country's resources for real wealth-production, and, therefore, of converting these representatives into real money.

The foregoing is true of the Internal Commerce of any country. For the purposes of International Commerce, and the settlement of the ultimate balance of obligations between nations, after the main stream of commodity and services imports is set off against the converse stream of commodity and services exports, Gold is still indispensable. No doubt, a large proportion of international trade transactions is settled by Trade Bills, without an ounce of Gold moving from one place to another. These Trade Bills may be inflated, over and above what would be warranted by actual commercial dealings between given countries, by the interposition of Capital movements from one place to another, and by the payments for "invisible Imports or Exports," as the phrase goes. The latter consist of freight payments, bankers' commissions, tourist expenses, immigrants' remittances, and political tributes, etc., which may effect either side of the Balance Sheet. Hence the

necessity for gold movements to settle the final balance of accounts between nations is still further reduced.*

But, when all allowance is made for these factors, when account is taken of the use of substitutes and of multi-linear trade and credit to settle international obligations, the fact will have to be admitted that the ultimate means of payment, the last recourse is to the universal medium of exchange, Gold.*

Regarding that other term in the definition of Price,—Exchange,—we mean by it any act of buying and selling, whether within a country or as between countries, which is effected through the intermediation, or the instrumentality, of Money. Prices are impossible except in such transactions; and they can be ideally made only in an open Market under conditions of perfectly free competition. How far these conditions are fulfilled, how far Prices conform in actual practice to their theoretical explanation, we shall now proceed to examine.

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* The following statistics about the manner in which the Balance of Accounts between nations is struck will indicate the net items that have to be included.

N. B.—*Figures are in Millions of Gold Dollars.*

	Balance of Merchandise Trade	Interest and Dividends	Other Services	Gold	Capital Movement	Final Total
United States—						
1927	417	679	—572	—6	283	801
1929	382	699	—681	—175	—134	91
1931	17	621	—493	—145	—165	165
1933	87	308	—244	140	—248	43
United Kingdom—						
					..	574
1929	—1854	1216	1138	73	..	112
1930	—1878	1070	944	—24	..	—313
1931	—1850	771	607	158	..	—248
1932	—1006	508	301	—52	..	—662
1933	—875	513	348	—649		
France—						
1929	—435	752	..	—336	..	—19
1930	—506	708	..	—460	..	—257
1931	—513	453	..	—727	..	—786
1932	—394	181	..	—827	..	—1041

N.B.—A *Plus* sign means credit movement or Capital Import, and *Minus* sign means a net Debit movement or Export of Capital.

THEORY OF PRICES.

Having explained the principal terms in the definition, and bearing in mind the distinction between *Value* and *Price,* there will not be much difficulty in understanding the Theory of *Prices,* now most commonly accepted by economists in commercial societies.

Since the *Price* of an article is an expression of its value in terms of Money, it is determined by or takes place at the junction of two independent forces acting like the two blades of a pair of scissors. These forces are known as Demand and Supply. The demand for an article expresses the need of human beings for that particular article, which is expected to satisfy the particular requirements which cause this need. In virtue of this want, the individual feeling it is prompted to offer, for a given quantity of the commodity he needs, a certain quantity of another commodity he has, and which would be accepted by everybody in exchange for any commodity or service. The commodity offered thus universally in exchange is taken to measure the intensity of individual wants, or the degree of sacrifice each individual feeling the particular want is prepared to make on that account.

It may be noted, even at this stage, that the exchange need not necessarily be between the article a given individual needs, and Money. Any other article, which this individual has, and the need for which is either not felt, or not felt in the same degree, may be given in exchange. But this kind of exchanging one commodity against another,—Barter,—is admittedly inconvenient, needlessly complicated, and utterly unsuitable for measuring relative values with any degree of stability. Even if Barter is suited to a society of Robinson Crusoes, it is utterly unworkable for a modern developed and complex society. A common Medium of Exchange, universally acceptable and accepted, is, therefore, invented, simplifying the task of measuring relative values and expressing them concretely. By the use of money, each act of exchange is in reality duplicated, *i.e.*, first, one commodity or service is given in exchange for Money; and then Money is given in exchange for other commodities and services needed by the individual who began this process of exchange.

Money is, of course, not an article of consumption by itself. An ideally perfect Money should be such as would

serve no other purpose, except to effect exchanges. But such a perfect Money is impossible to discover, for the simple reason that, even though devised,—in some imaginary quantity or abstraction,—it will not have that intrinsic utility of its own, which gives sound Money the initial value ; and the consequent capacity to serve as a common medium, and a universal measure of value. Such a Money material,—which would also be not easily perishable, and therefore convenient to store up for future use,—an excellent embodiment of readily mobilised wealth or purchasing power,—such money and all its substitutes or representatives, will not have,—in a sufficiently prominent degree, the inconsumable quality which is the essence of good money.

The Demand spoken of in the foregoing explanation is not merely individual demand. For a proper price to be formed, it must be the net effect of the aggregate demand of all desiring the article in question. It may also be the net effect of all mutually competing demands, let us say for articles which compete *inter se*, or can be mutual substitutes ; *e.g.*, tea, coffee, cocoa, chocolate, beer, or other drinks. The articles demanded may also be composite, so that the demand affects more than one commodity at the same time. Let us, however, speak in terms of single individuals ; and of single commodities, for the sake of simplicity in exposition. The proportion and manner in which the individual in the preceding analysis is prepared to offer Money in exchange for a given commodity may be said to represent and measure the *utility* the individual in question attaches to that article. When his need for that article is particularly high ; and when the supply of it is limited, he may be ready to pay for such a commodity a much higher quantity of money than when his need is not so intense, and the supply elastic. If the article in question is capable of subdivision in equal parts, without any impairment in the parts of the quality of the whole, then his need,—and, therefore, his Demand,—for the successive portions of the same commodity is likely to be progressively diminishing. His readiness to offer a large measure of money for the second portion will not be as great as that for the first ; while that for the third will diminish still further. In other words, according to this conception of the origin of Price-making, with every increase in the quantity of a given article possessed by a given individual, his need for that article will diminish ; and, consequently, the amount of money he would be prepared to offer for the successive instalments of the

same article will likewise diminish progressively, till we come to a point where he would offer no more money for any further increase in his stock of a given article.

In so far, however, as the same article is wanted at the same time by a number of individuals ; in so far as the successive quantities of such article or service are of a homogeneous character, permitting infinite subdivision without loss of any material property ; and in so far as all available stock of the commodity or service in question is available at the same time in a public market, where a number of demanders compete for its possession, without regard to the degree of each individual's need for the same, or to the different utility attached by different individuals to the same quantity of that article, the Price of that article or service will be determined,—according to this Theory,—by the Marginal Utility derived from the final quantity of the article in question obtained by an individual, for which he offers money in exchange at the lowest rate.

As the Demand will be that of several individuals competing simultaneously in the same market for the same commodity, the market Price will really be the result of their collective pull. In this, the utility of the final portion of that article,—itself competing with a number of other alternatives, or substitutes,—to any given individual, cannot be concretely or accurately expressed. It is, therefore, a mere abstraction,—useful, perhaps, for purposes of analysis and exposition of the working of certain forces ; but useless for all practical purposes.

The Demand side, moreover, is not the only consideration which determines the Price. As already observed, Demand is but one of the two blades of a pair of scissors, which act simultaneously on the same piece ; and whose interaction can alone bring about the result, *viz.*, Price. There is, therefore, as a counterpoise to the Demand side, the Supply side of the same commodity or service, which has at least as much voice in determining the final Price as the Demand side.

On the Supply side are comprised the factors which are collectively expressed as the costs or expenses of production,—*viz.*, cost of raw-materials, wages of workers, rent of buildings, interest on capital invested, and profits in a capitalist society of the organisers or proprietors of an

enterprise, not to mention rates and taxes, and other overhead charges, or middlemen's commissions.* Unless these expenses are all reimbursed by the sale of the total commodity or service produced, the process of production of that commodity cannot go on ; and its supply would accordingly be not forthcoming in the required quantity. If the Supply falls off, and a smaller quantity than demanded is available for exchanges, its marginal utility will rise, and so also the price that the Demand side is willing to pay, till for the reduced supply the total price paid is equal to the total expenses of production of such supply. The aggregate sacrifice, therefore, which the users (or demanders) of this article are prepared to make in terms of money, in order to obtain the quantity of that article each needs, must be equal to the aggregate of the expenses incurred by the producers. Otherwise the junction point of demand and supply will not come about ; and no Price formed. An effective Demand must, therefore, be such as to reimburse the expenses of production for the largest quantity of supply. We shall not labour this point any further at this stage.

This is the famous Marginal Utility Theory of Value,—and therefore of Prices. As outlined here, and as commonly accepted among economists, it has many defects and shortcomings on either side of the equation of demand and supply. Without going into all these deficiencies, it may be pointed out that the Theory,—if it is accepted at all as a satisfactory explanation of Price formation,—must be accepted with considerable reservations and limitations: (I) On the side of Demand, (*a*) it necessarily takes no note of the subjective element, of the variations of the individual's temperament, outlook, and circumstances ; or (*b*) of the differences in point, of time between the same individual's need for the same article, which may radically alter the degree of utility derived from the successive doses of the same. (*c*) It further assumes that all the articles forming the objects of exchange are necessarily of a homogeneous character, capable of equal and uniform subdivision, the several portions of which have the same physical characteristics, the same inherent capacity to meet a given want, or to minister to a particular need. But this is seldom found for any commodity in real society, much less for any service. (*d*) It assumes, more-

* "Cost of Production" has a Social and Psychological meaning, which, though very important, is ignored in the above exposition for the sake of convenience only.

over, that, of the given article, there is but one quality, and no substitutes ; and that it is offered in its entirely for sale, in an exclusive compartment by itself,—again utterly untrue in real life. (*e*) It assumes that every individual attaches the same value,—as indicated by the market Price,—and has the same utility for Money, that is hardly ever the case. (*f*) It assumes, likewise, that individuals do not change their habits, and so there is neither qualitative nor quantitative change in Demand from this side—an absurd assumption as shown by the Hoover Report. The variations in the purchasing power of the different individuals at the same time, and of the same individual at different times, and in different places, are no less important in the determination of the Price than the considerations outlined above.

There are two further limitations, or modifications, of this Theory of Prices on the Demand side,—which are of a more radical character than those noticed so far, and of which account must, therefore, be taken if the theory is to be properly understood. In the first place, for the collective demand to be effective, account must be taken of the variations in the *Population* of the world collectively, or of each constituent unit of the world separately, as the changing aggregate of the individuals would materially affect the Demand. The world population increased very rapidly in the last century ; and the increase is even now continued, though the rate of increase has been very considerably modified in recent decades The growth of population is, accordingly, no longer considered as likely to outstrip man's productive capacity ; though scientists and economists have not yet worked out the absolutely suitable figure for the world as a whole. There are large areas of the world, suitable for human habitation, cultivation and development,—as in South America, Africa or Australia,—which are yet all but deserted ; while considerable regions seem to be over populated,—reaching in Belgium, Britain, China, or the Gangetic Plain, a density of over 500 souls per square mile. The problem of population, thus, is rather one of uneven distribution than of absolute and insupportable excess. But this unevenness in distribution is made more harmful by the growing force of economic nationalism, which casts all sorts of obstacles in the free migrations of human beings, by anti-emigration laws, and by invidious taxation of foreigners. Again, the problem, as affecting the Demand side of the Price equation, is not one of quantity only ; the quality of the population,—the degree of civilisa-

tion and cultural advancement leading to a multiplication and variety of wants—has also an important bearing. In this latter connection, the point worth special remark is, that wherever the tendency is noticeable to a deliberate or artificial restriction of the population, the classes or strata of society affected by such developments are probably the most important in a community from an economic point of view; and so the thinning of their numbers,—often simultaneously with an indiscriminate increase in the numbers of the less desirable elements,—must materially affect the aggregate as well as the individual demand.*

The other such factor operating on the Demand side, and deserving special mention, relates to the psychological aspect of that phenomenon. Man in a civilised and progressive society is not content with the same food, shelter, clothes amusement as the generations before him weie. And even where the substance of his primitive wants does not alter, its quality may change radically, and so affect his demand materially. The illustrations given in the Report on the *Recent Economic changes in America* regarding the American peoples' altered demand even of food-stuffs—and in the recent League of Nations Publications on the World Economic Survey, would, if referred to, amply convince you of the truth of my observation.

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* In this connection the following comparison of the world population, and its distribution by continents would be interesting.

(1913=100)	1913	1927
World Population	100	109·0
Europe.	100	10605
Proportion of World Population ..	27·3	26·7
North America	100	123·1
Proportion of World Population ..	5·9	6·6
South America	100	140·9
Proportion of World Population ..	3·1	4·4
Africa	100	111·0
Proportion of World Population ..	7·3	7.5
Asia	100	106·7
Proportion of World Population ..	54·3	53·1
Oceanea	100	123·0
Proportion of World Population ..	0·4	0·5

Compiled from the *Memorandum on Production and Trade* 1913 and 1923/27, Geneva, 1929. The same document shows World Production to have increased in the same period as follows:—

1 General Index 21 o/o
2 Food-stuffs 13 o/o
3 Raw-Materials 35 %

11. Even on the Supply side, the Theory of Marginal Utility does not satisfactorily explain the meeting point between Demand and Supply, where prices are supposed to be formed. The supply side is affected by conditions of production, by variations in the quality and quantity of the factors necessary to bring about a given production ; by technical considerations of the equipment, organisation, and marketting of the production ; by geographical and even by historical factors. These do not always find their due importance in the Theory of Prices outlined above. Whereas on the Demand side,—or in considering the sacrifice an individual is prepared to make in consideration of the utility he is supposed to derive from the possession of the successive doses of the given article,—the ability of the particular individual to obtain any instalment of the article, or his purchasing power, is a most important, but not a constant factor, and without which no Demand is effective ; so on the Supply side there are factors causing considerable variation in the Theory outlined above, to which the propounders of the Theory seldom give adequate consideration.

(*a*) In the first place, the costs or expenses of production are not in every instance a contant quantity, or varying directly in accordance with the increase or decrease in the quantity to be produced. Not only that there are variations in the costs of production of the same article in different places, or at different times ; but they are being incessantly altered according to the scale of operations, or on account of scientific discoveries, mechanical inventions, or technical improvements. The larger the scale of operations, the lower, generally speaking, is the cost of production. Hence a much lower price would suffice to reimburse all the costs and expenses of production.

(*b*) An exception, however, is caused to this general rule, by the development of Trusts, monopolies, business combines, which all fix prices, not as dictated by the simple laws of Demand and Supply, but in accordance with the preconceived plans of profit-making which the organisers or directors of such enterprise require. The influence of this factor is growing in every modern industrialised country, so that large blocks of Supply are being taken out of the operation of the above theory, if it holds good at all.*

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* See Lecture on Rationalization.

(*c*) Of a piece with the preceding is the state or municipal regulation of prices of important commodities or services, supplied to the community as a public monopoly. Profit to the operators is not here a dominating consideration; but the consideration of service which is predominant in the mind of the regulating authority operates no less clearly in defeating the Theory of Marginal Utility from the supply side. That theory can only function in a world of absolutely free competition. But we are to-day setting once more into the region of public or monopolist regulation of prices, which is fatal to that theory.

(*d*) Finally, there is the influence of new discoveries and inventions which lead to the establishment of new industires, or the renovation and reorganisation of existing ones so completely as to make them new industries for all practical purposes.† In the case of newly created industires,—*e.g.*, cinema films, art silk, wireless apparatus,—the *entrepreneur* in each given case must arrange for a supply without any knowledge of the extent of the demand for such new creations. He must take risks while the industry is yet in its experimental stage, and trust to a market developing after people have been accustomed to use such new creations.* In the price he charges for such production, he must try and reimburse himself, not only for all the ordinary expenses of production, but also for all the costs of experiment and wastage, and building up a market while the commodity or service is yet unfamiliar that must be incurred if any sales are to take place at all.

(*e*) As regards articles, in the technique of whose production there are going on constant changes and improvements, affecting radically the cost of production; or the methods of marketting which are similarly being improved; or the extent and range of the market for which is being profoundly altered; of the devices,—*e. g.*, instalment selling, or the Hire-Purchase system,—are adpoted to facilitate the largest possible sales; or new substitutes for which are being brought into use†—in all those cases the supply

* See for illustration of the latter class the Report on *Recent Economic Changes in America*,—Vol. I, Ch. 3.

† The present economic position of Germany has compelled recourse, as in war-time, to developing synthetic raw-materials and substitute food-stuffs, almost to the extent of guaranteeing national self-sufficiency This, if realised, cannot but affect the world price-level most profoundly.

side of the equation offers a more bewildering maze of factors and conditions operating than even the Demand side as shown above. The Industrial Rovolution, begun about 1780, is not ended yet; while the social and Political revolutions occurring in our own generation are very profoundly affecting and altering the entire economic structure of society. The combined force of these factors makes the Supply side utterly undependable for working out such abstract theories as the one relating to Prices sketched above.

III. There is, again, the very radical and considerable limitation of this Theory imposed by the phenomenon of *International Trade*. Neither the Demand, nor the Supply, side of the equation could be relied upon to function on this plan, the moment international competition enters to deflect the needle. I cannot go, in this Lecture, into all the disturbances caused in a local Price-level by the introduction of Foreign Trade, without even thinking of such attempts at regulating Foreign Trade itself by means of tariffs, subsidies, quotas, etc., under the combined weight of which the commercial world is staggering to-day.

The Theory of Prices founded on the doctrine of Marginal Utility is, therefore, true, if at all, in a society wherein there is absolute freedom of competition; wherein there is no foreign trade; wherein no changes take place in Demand, whether quantitative or qualitative, physical or psychological; wherein production is carried under conditions of absolutely constant costs, without improvements or innovations, without political manipulation or economic regulation. In a word in an utterly static society. This does not exist anywhere; and so we need not consider the Theory any further.

IV. When we have enumerated all these limitations of the Theory of Prices founded upon Marginal Utility, we have only dealt with one side—the commodity or service side—of the equation. As I have told you already, however, Price is a *Ratio in Exchange*, which establishes the relationship between a given service or commodity, and the Money of the locality in question,—or Gold, which is the international medium of exchange. In considering the Theory of Prices, therefore, we have to bear in mind, not only the factors affecting the Demand and Supply of commodities and services, offered for exchange, but also the corresponding factors affecting the Money material in which Prices are expressed

As already pointed out earlier in this Lecture, Economists are generally agreed that Money, or the Medium of Exchange, must be so chosen as to be the least susceptible to variation on its demand or supply side. Then only would it be best suited to express the constant variations in the prices of commodities and services for which it is exchanged. It is of the essence of a stable economic system that, wherever the time element is involved between the commencement and the end of a transaction, or the exchange of commodities and services, there should be as little variation in the value promised to be given at the commencement of the transaction, and that eventually obtained at the time of its completion as possible. In other words, the medium of exchange, in terms of which these exchanges are made and expressed, must not itself change in the meanwhile, but must, as far as possible, express the same value. This desideratum is most particularly required in regard to the loans of money itself. It is with reference to this requirement that every writer on Money desires as far as possible so to choose the money material, so to regulate its supply in all its various forms, as to admit of the least variations due to changes in the Supply of or Demand for money.

I will not detain you very long by a consideration of the several forms of money, or the different materials chosen to serve as money in different communities at different times. I will only remind you that, under modern economic conditions, by common consent of the civilized commercial world, the so called precious metals,—Gold and Silver,—have been regarded as the most useful and relatively unvarying commodities to serve as money. There are other metals still used for the same purpose,—such as Bronze or Copper; but their use is now relegated mainly to subsidiary coinage required for small change for the daily needs of retail purchases. Even Silver has in recent times ceased to be the standard metal, not only because in view of the enormous growth in the value of world commerce, it would be a most inconvenient medium to settle the international balance of accounts; but also because the conditions governing its supply have changed so completely that the original value of Silver has fallen very considerably in relation to Gold.*

* In recent months the American Government have been endeavouring to rehabilitate Silver as Money material, by fixing a legislative ratio of 50 c. for oz. of silver, and authorising the U. S. Treasury to

(Foot-note continued on next page).

Gold is thus by common consent, and because of its natural, inherent qualities, regarded as the most useful material to serve as the basis of all money economy. Its supply and demand are such that, in the absence of artificial strain or circumstances, it retains its value in exchange for other commodities and services, at a fairly stable level; and so serves excellently as a common medium of international exchange and a standard for international payments.*

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buy Silver upto that price. The Treasury needs to buy some 650 million oz. of Silver to meet the requirements of the law fixing a proportion of silver at 1 : 3 in the Currency Reserves of that country. The public, however, does not know how much of that Silver has already been purchased, and whether the Treasury would also *sell* any Silver so purchased. All operations connected with this policy are shrouded in mystery. In so far, however, as the legislation, and executive action in accordance therewith, aim at bringing about an *International Bimetallism*, it seems unlikely that the effort would be a success. In the first place, absolute control of the supply as well as the demand for Silver is not possible, except under an international agreement which is conspicuous by its absence. An International Bimetallism may be feasible, but seems unattainable; because to adopt it would mean for many countries a complete recasting of their national economy. Moreover, to maintain an International Bimetallism, good faith of the agreeing parties cannot be merely presumed. Substantial guarantees will have to be given,—in the shape perhaps of *valuta* being held in some foreign centre like Geneva—which most sovereign States would deem incompatible with their sovereignty to give. Under these circumstances, it is impossible to believe that Bimetallism is a practicable proposition—even apart from the still larger question, whether even if it is adopted, it will make prices more stable —a wholly doubtful eventuality.

* The annual production of new gold, shown in the following statistics, is estimated to be some 3% of the total gold stocks of the world available for monetary purposes. Of this, before the leading countries of the world went off the Gold standard, about $\frac{1}{2}$ to $\frac{2}{3}$ was absorbed for currency purposes—including coinage as well as reserves,—and the balance went in industry or hoarding. As, however, the trade of the World — without counting local trade,—was expanding before the Depression began, — at about the same rate as the annual addition to the world stocks of gold, the new gold did not create much disturbance in the price level, because of the increasing supply of Gold. Even when, after Britain and her associates had abandoned the

World Total of Gold Production (in Kilogrammes).

1924	562,000
1925	559,400
1926	568,800
1927	570,300
1928	575,600
1929	579,400
1930	603,000
1931	641,600
1932	696,000
1933	700,000

(Foot-note continued on next page.)

Gold is, however, by its very nature, so limited in supply; and the conditions governing further additions to our present stock of that metal are so hard, that it cannot possibly serve for all the every day requirements of every individual in a commercial community. For transactions of very small value, like those needed to satisfy the daily wants of man, its smallest unit is often too large. On the other hand, for the larger transactions of international commerce, its supply is too limited. This limited supply is further reduced by the tendencies of the peoples of the world to store or hoard gold, because of its relatively unvarying, or steadily appreciating value in terms of other commodities or services. It has, therefore, to be supplemented, in an efficient monetary system, by substitutes like paper money, whether in the form of Government currency notes, as in India, or Bank notes as inEngland, France, or the United States; or by commercial paper as in all leading countries of to-day; or by deposit currency, like cheques. Of all these forms of the monetary system of a given country, from the standpoint of the ordinary requirements of economic life in that community, gold is probably now-a-days used the least—not more than one per cent.,—if even so much of the total use of money. Even Bank Notes or Government Currency Notes occupy, in the more advanced commercial and industrial communities, a very subordinate place,—hardly exceeding perhaps two or three per cent., of the total money used in those communities. Since the war, gold has practically disappeared in these communities from every day monetary use; and its place has

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Gold Standard, the Gold stocks of India were released, and the total increase in world supply was also inflated by a premium on gold production, the increasing passion of American and French currency authorities to hoard up Gold has absolutely neutralised these new additions. So that changes in the general Price-level cannot reasonably be said to be due, in a material degree, to fluctuations in the Demand and Supply of this money material.

That Gold in the vaults of the Central Reserve Banks of the leading commercial countries,—France and America have between them over ⅔ of the gold reserves of the world—is sterile to-day, but can be utilised to raise prices and lift depression, is a view frequently expressed in authoritative quarters. But it seems to the present writer to be founded on a fundamental mis-conception of the role of National Gold Reserves in credit expansion and production increase. By a mere increase in production we do not solve the problem of the World Depression. The purchasing power of the whole mass of humanity must be raised if the increased production is not to intensify depression. This means that the Distribution of wealth must be also radically revised. And there lies the root of the world problem.

been taken by these substitutes, mostly the various forms of paper money, or deposit currency.

The basis, however, of this deposit currency, and the guarantee of its value being maintained in tact over a period of time, lies in those provisions of reseive against such representative money, which require that gold in prescribed proportion be maintained by the authority concerned with the issue of such substitute forms of money. In this series of Lectures, I cannot go into the various regulations of the several countries regarding the proportion, and the use, of the Gold reserve against paper money of all sorts. The provisions regarding such gold reserves are different in different countries, in their legal form or conventional validity, as also in their quantitative position, according as the Reserve is for the paper money which is the legal tender of the community, or for the commercial or deposit currency. In the former case, a fixed proportion, or a prescribed amount, must always be kept in reserve with the note-issuing authority, to permit of conversion of such legal paper money into gold. The law relating to such proportion (or amount) may be altered, and the proportion or amount be modified. As this Reserve is entirely for local use, the law regulating it may be varied by the local legislature as and when it likes; for to a sovereign country's authority in such matters, there are no restrictions, even to prevent it perpetrating dishonesty. But while that law stands, the note-issuing authority in every country,—whether a government or a Central Bank,---must maintain the proportion or amount of Gold in the Currency Reserve as required by the Law.

When a country is off Gold, this Reserve no longer is needed to serve the purpose for which it was originally instituted. It then becomes indistinguishable from that other Gold Reserve, which is required to maintain a country's international credit. This latter is not always or necessarily regulated by law; but it is managed with no less exactness by the Banking authorities responsible for this function. In the last analysis, it is also the basis for the increase or decrease in the Deposit Currency and the credit money in the country. For the Bankers, holding deposits and honouring cheques drawn against these deposits, must so invest the monies deposited with them as always to maintain a certain portion of cash to the total volume of deposits with them. And if the Central Bank, or the national currency authority in the country holding the available cash (gold) of the com-

munity, so manages its own investments by its discounts of Bank paper, or advances to the commercial world, or purchases of securities on its own account, as to increase or reduce the supply of such available cash, (gold), the other Bankers will be obliged to expand or curtail their own credits granted to their customers, thereby the volume of the Deposit Currency in the community, and so ultimately the volume of business, and the level of prices in general.

The total volume of money of all forms available in any community is thus, though not rigidly fixed, capable of variation within distinctly definable limits. Gold or legal tender paper money is capable of a certain expansion without any actual material addition to its volume in circulation, according to the rapidity with which it circulates, and the frequency with which one and the same bit of such money is used to discharge more than one transaction. Other forms of paper money are likewise capable of manipulation in either direction by the authority ultimately responsible for the management of the national credit and currency systems. With all these factors operating simultaneously---Bank or Government notes, credit or Commercial currency, inconvertible paper money; rapidity of circulation—it may be just to observe that the modern monetary system, as a whole, is capable of such adjustment, regulation and control, as would admit of its ready response to the changing conditions of demand and supply in the commodities and services, whose prices we are concerned with.

There are, however, two important points, on this side of price-making, which deserve more than a passing reflection, even in such an outline as this. Money is one of those few commodities, to which, in our present capitalistic communities, *the law of diminishing utility* does not apply. Because Money is to serve as, not merely a medium of exchange, but a store of value at the same time, it is the commodity Money-Gold—which is used, not merely for affecting exchanges, but also to hold wealth, to store up, as it were, purchasing power over other commodities and services, for an indefinite future. Now, in so far as this factor operates at all prominently in any community, the supply of money at any given moment is liable to be reduced beyond the calculation which would admit of an automatic adjustment. We have, however, to remember that, just as the tendency to hoarding may diminish the supply of money, so, conversely, the *rapidity of circulation* of money may also *apparently*

increase the quantity of money available at any given time for affecting the given number of exchanges. By *rapidity of circulation* I mean the capacity of the same quantity of money (the same volume of coins or notes or cheques) to serve for discharging a much larger number of transactions by being passed from hand to hand without being consumed or destroyed in the process. If the original object of evolving a money instrument is borne in mind, and if the principal function of money material is rigorously enforced,---*viz.*, that money is to serve only as a medium of exchange, and must possess no utility in itself,---then there will be little or no impediment in the way of the greatest rapidity of circulation. All forms of representative Money, which have no intrinsic value in themselves, and which cannot, therefore, be hoarded, would admit of the most rapid circulation; and in so far as the bulk of the modern circulation consists of such representative Money, hoarding will be automatically discouraged. And, in addition, there is the more recent development of leading commercial countries, like Britain, breaking faith, and "going off gold" on their own hook, without any regard to the damage done in this way to other countries who had trusted to their bond and word. Such a development cannot but militate against hoarding.

Finally, there is the factor of such a manipulation of the supply of money by the authority concerned with its issue and regulation, that there may be an increasing quantity greater at any time than what is required for the current exchange of commodities and services, or *vice versa*. The quantity of money maintained by a community must be such as to be capable of almost automatic expansion or contraction, according as the volume of transaction, for which the quantity of money was originally provided as adequate, increases or declines. If and when this quantity of money increases, while the total volume of transactions remains the same or declines, the prices of commodities would rise, as the value of money in terms of these commodities falls; and, *vice versa*, when this quantity of money diminishes, and the volume of transactions remains the same or increases, the prices of things in general would fall, and the value of money would rise. This so-called *quantity theory of money* does not function quite so simply nor so mathematically exactly as the above explanation might suggest; but it is relatively true.

The Demand side of the money material is more difficult to unravel. Merely because the

it does not follow that the Demand will automatically and instantaneously respond. The ultimate source of the demand for money lies in the degree of material prosperity evenly distributed all over that community. The index of prosperity, as given by a mere increase in the volume of material production, would be misleading—as has only happened too frequently in recent history and discussion. The material prosperiety, to be real and effective on the demand side of money, must be generally—equally— shared by the whole community. Unless that is assured, manipulation of monetary supply will not solve the problem of world depression. And as the leading nations of to-day have not yet perceived this central truth of social economy,—Russia alone excepted,--trade cycles of depression are becoming progressively more intensive.

With all these factors affecting the Money-side of the equation in Price-making, it is impossible to say that Money is itself the cause of Prices ; or that Price movements can be manipulated in the direction desired by simply manipulating the money supply. To start with, the Money Supply of a community, at any given starting point, is not a fixed quantity, fixed by the authority of that community manipulating the community's monetary system. The existing money-supply is the result of economic conditions and historical forces, especially in communities intimately connected with other communities by the ties of trade. It is a mistake, which many modern monetary theorists commonly make, to assume that any modern commercial community is a unit by itself, living in a water-tight compartment of its own ; or that, being such an entity by the force of War or Revolution, cutting it off from its sister communities, can long remain so isolated and exclusive, living and moving in an orbit of its own. Trade ---exchange of one's country's commodities for another's,---is certainly not an absolute necessity of socialised, organised humanity. But the known forces of history, and the indisputable tendencies of modern economic life, irresistibly result in some commerce between communities, which now is confined by no barriers of geography, nor limited by any affinities of race, sympathy of economic organisation, or similarity of cultural outlook. There are communities, indeed,—and very important ones, from the point of numbers, or resources,—like Russia, China, India, or the United States,—which can, if they tried hard, be self-sufficient and utterly exclusive, even under modern conditions. Such an exclusiveness would

cost them nothing by way of economic insufficiency, or spiritual stuntedness. But even these communities cannot long remain untouched by Trade ; witness, for proof, the anxiety of Russia to establish trading connections with communities pursuing social ends wholly alien to her own.

They can, indeed revolutionise trade, and fit it to meet their own requirements. The isolated action of a number of such communities may recast the whole basis of world trade. But, admitting all this, trading is an economic necessity, which cannot be ignored even by the best organised communities.

In such an age of universal trading, the monetary system of no community, however powerful, can remain for a long while unaffected by international currents,—at least so long as the organisation of production in that community is based primarily on Exchange, and not on use. The debits and credits of International trade ; the movements of specie and of capital between one country and another ; the inextricably complex stream of innumerable mutual obligations for tourist payments, or immigrants' remittances, abroad ; and interest, freight, or insurance payments, political tributes, open or concealed—all these influence materially the value of one country's money in terms of other countries'; and, by consequence, in the country itself. It is, of course, possible to stave off the adverse effect of all such cross-currents by converse operations in international accounts for a limited period of time. It is possible, likewise, to regulate the direction and volume of a country's foreign trade by suitable fiscal measures and policies. It is possible to repay one's foreign debts by making new debts, or conceal a national deficiency of aggregate income wealth by living on Capital, or starving one's people, undermining their vitality, and reducing their economic efficiency. It is, likewise, possible,---and, strange as it may seem, it has actually been done by the most respectable nations,---to dis-own one's obligations, to break faith.

But all these are temporary expedients. They are not the final remedies of a real disease in our body economic. The monetary system of the world, distorted by such unusual, unnatural expedients by fits and starts,

cannot regularly discharge anywhere its normal function of its healthy life. But that does not mean that the system has proved its amenability to such disjointed, haphazard experiments. Much less does it prove that, by manipulating the monetary system only, we could regulate the Prices in general as desired, or even stabilise them, in a society dominated with commercial ideals, and actuated by individualist greed.

What cannot be accomplished, with regard to Money, in its international aspect, cannot also be really achieved in a given community either. At first blush, this proposition seems manifestly at variance with the known facts of recent monetary history in many a leading country of the world. And particularly is this so, if we confine our gaze only to a limited period of time. For, within such a restricted space of time, in a sovereign State, with a well-developed banking organisation, the manipulation of the currency system can really affect materially the general price-level. For, now that metallic money is practically excluded in all advanced communities from actual circulation; and its place is taken by representative money of all kinds, capable of definite control by the money issuing authority, the manipulation of the total volume in circulation is not at all an impossible task. You have but to change the law relating to the amount or proportion of the metallic reserves against the paper currency in circulation ; you have but to order the Central Bank to manipulate its discounts and Investment policy in such a way as to give an appearance of ease or tightness in the money market, and the movement will not fail to reflect itself in the prices of commodities in general.

In this sense, and for a limited space of time, the bankers of the community may be credited with the power to manipulate the value of money in terms of prices in general. But that is true only as a short time expedient ; and even then in a highly organised community. The process, moreover, must, to be effective, be backed by an intense national campaign against hoarding ; a tight hand on the financial speculators and stock-exchange gamblers ; a ceaseless propaganda of the " Buy British " character; and a whole host of fiscal provisions, international treaties, trade regulations, and even actual price-control, which cannot be always maintained at the same pitch in an individualist commercial community. The bankers cannot keep up the

race, unless the productive organisation and the consumption system responds; for their action, even when most effective, affects only the top of the problem. By a merely liberal loans or discounts or credit policy,---or the reverse; they cannot always hope to regulate the entire national production as they,---or those who dictate their policy to them,---desire. The community must have enough resources and equipment to keep readily functioning, and in instant harmony, the two sides of the national economic system: Production and Consumption. There must, therefore, not only be an adequate saving of the surplus of production over consumption to keep the process up; but there must be a sympathetic variation in the price-level, as well as the cost of living, all along the line; otherwise the manipulation will break down. For, the moment the suspicion takes root that Prices are raised to add to the *entrepreneur's* profits, without anything like a similar increase in the workers' wages, the policy will not be supported. On the other hand, if the surplus of the annual wealth produced in a community is not all properly invested in keeping up or furthering the productive process, the Bankers' manipulation of the monetary system of the community will not by itself suffice to keep up the Prices at the level desired.

It, is therefore, only within very definite limits, and under highly organised conditions, that manipulation of the monetary policy in a community can succeed, for a limited space of time, in regulating the general price-level. For any permanent and more simple determination of the Price-level, we must depend upon a combined attack on both the production and consumption of wealth, as also on the means devised for its measurement and valuation.

Summing up this discussion on Prices, then, it may be mentioned that the laws governing Prices are by no means fixed and unchanging, or even definitely enunciable. The factors concerned are so many, and mutually so involved and intertwined, that it is impossible to treat them as though they concerned a simple phenomenon, in an isolated compartment by itself. In the absence of a completely socialised economic system, and a scientifically Planned Economy of the community, Prices must be the result of forces of Demand and Supply affecting the commodities and services, with all the limitations, conditions, and reservations under which these forces can operate; as also the corres-

ponding factors affecting the Demand and Supply of the Medium of Exchange called Money. A clear rule out of the turmoil caused by these conflicting forces is impossible to deduce and formulate. All that we can say is : that Prices are capable of being influenced, for short periods of time, and in given communities internally, by a careful control or manipulation of the Monetary system more easily, than by a corresponding attempt to regulate the commodity side of the equation.

But even admitting that, it may be questioned if it is in the interests of the community, of humanity as a whole, that Prices should be thus regulated with a view to ensuring a greater stability than happens to-day. Absolute stability of prices is much less desirable than it is feasible. It is the mark of a dead-alive society, which no economist can advocate, and no statesman can accept. It is fatal to that advancement of the economic system, that improvement in the technique of production and distribution, without which humanity will not grow out of the repressed and backward state in which it labours to-day. Even, therefore, if it were possible to regulate and control prices, in a commercial society, according to some definite laws, it would not be desirable in public interest to do so.

There is, however, one exception to this remark, which I would like to mention before closing my remarks this evening. What is wrong with our present Price mechanism is: that it fails in its own original purpose. It is unable to express real value, and much less to measure it. It has become the prey of individualist cupidity, which it was never desired should be. If this root evil of our present economic system is to be solved, the remedy lies, not in vain and self-stultifying manipulation of the money mechanism, in the hope of controlling prices, but in a wholesale and radical reconstruction of the entire social system to replace the insane individualism of to-day, with a more rational, more productive, more just and healthy social life In a completely socialised community, it is possible, not only to regulate Prices ; it is possible and easy to control Prices so as to make them a true expression of relative value, with due regard to the aggregate productive equipment of the community collectively, and its total wealth.

I shall close this Lecture now with a review, by way of an Appendix, of the Price Movements in recent times.

APPENDIX TO LECTURE III

Measurement of Price Changes.

I propose to consider, in this appendix, the methods and devices invented hitherto for measuring the relative changes in the prices of commodities and services. The mere change in the obvious money value may not express any real change, at least in comparison to other articles and services. Whenever there are changes in the quantities of goods and services produced or exchanged, these quantitative variations are quite simple to note, observe and study. But the qualitative variation, or changes in the price-level are much more difficult to notice, and still more so to measure. To serve as basis for exact argument in a scientific discussion, mere impressions of individuals, however trained and precise in their impressions, would not suffice. For, by their very nature, these impressions are bound to vary from individual to individual, and so afford no real guide to the actual change that may have taken place. It is, of course, common experience that prices of the same commodities alter in course of time, within the knowledge or memory of one and the same person. But, to what extent has the alteration occurred, and what is the relationship of that alteration to others of the same character, will not be indicated by individual experience, in the absence of precise standards of measurement for the change that admittedly has taken place.

The changes in the Prices of commodities and services, which we thus seek to measure by a common standard of measurement, are not confined to a given period, nor to a single country. For such a Standard of Measurement to give really dependable results, we need to consider, not merely the factor of time, *i. e.*, changes in the general Price-level of commodities and services in a given community over a period of years,—but also as between two or more commercial countries with regard particularly to the articles of their mutual commerce, and the factors relating to the Demand and Supply of those articles and services within their

respective boundaries. Price is, no doubt, a quantitative expression of a qualitative phenomenon,—the money measure of not only the utility of an article, but also of the Supply of that article. To that extent, the relative utilities of the several articles and services needed by a given society, at any given time, are fairly well measured by this common denominator,—Money. But, as the money material is itself susceptible of changes in its own value, it is not always an exact means of measurement, especially when by that measurement we desire to institute comparisons between the prices in two distinct periods of history in a given community, or between two different communities.

We have, therefore, to devise another method or mechanism, which would help us to compare objectively the changes in the price-level as a whole, or as between the price-levels in two communities whose money material is not the same. In the latter case, we have, no doubt, a common denominator furnished by the ratio in exchange of the money units of the countries concerned, *inter se*. But, inasmuch as these money units may be functioning under totally different conditions of their own supply and demand ; inasmuch as they might be relating to conditions of production and standards of living radically different, we would have no real basis for comparison if we content ourselves merely with the monetary expression reduced to a common denominator.

All these difficulties are obviated, and the objective secured by what are known as the *Index Numbers*. An Index Number is defined to be " the ratio of a given year's price of a given article or series of articles to the price of the same article or articles in the year or period taken as the base for purposes of comparison." They are used, according to a high statistical authority,

> " to measure the changes in some quantity which we cannot observe directly, which we know to have a definite influence on many other quantities which we can so observe, tending to increase all or diminish all, while this influence is concealed by the action of many

causes affecting the separate quantities in different ways."

Thus conceived, this device is employed to measure all general movements in prices and costs of living, wages, production, consumption, etc. Sir Robert Giffen has mentioned, amongst the purposes for which the Index number may be used, the following:—

(1) "To enable comparisons to be made between the value of money incomes in different places which have often great practical interest."

(2) To enable historians and students making comparisons between the past and the present to give an approximate meaning to the money expressions they deal with, and say roughly what a given amount of money expenditure in a past age would mean in modern language.

To this may be added what in modern times is regarded as the most important of the functions of Index Numbers, (3) *Viz.*, to afford a measure of the extent to which trade and industry have been injuriously affected by a variation in Prices: and of the correction which it would be desirable to apply to currency.

Index Numbers are thus contructed by taking a number of articles—representative of the community's needs—averaging their prices, wholesale or retail as the case may be, over a given period,—usually a year, which is then called the base; expressing the average thus obtained as 100; and expresssng the correspondidg averages of succeeding years

as percentages of this base period.

	1	2	3	4	5	6	7	8	9	10	11
	Wheat.	Rice	Sugar.	Raw-Cotton.	Jute.	Oil Seeds.	Cotton Piece-goods.	Ghee.	Kerosene.	Steel.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs a. p.	Rs. a. p.	Rs. a. p.	Rs. a p	Rs. a. p.	Rs. a. p.	Rs.
1914	2 0 0	1 8 0	5 0 0	300 0 0	100 0 0	4 0 0	1 0 0	15 0 0	2 0 0	150 0 0	100·00
1934	1 0 0	0 12 0	8 0 0	210 0 0	40 0 0	2 0 0	0 8 0	20 0 0	2 4 0	180 0 0	80-00
	50%	50%	160%	70%	40%	50%	50%	133⅓%	112½%	120%	

In the above table the price of 1914—average for the year in each instance, is taken as 100, as also the aggregate. The corresponding price of 1934 for the same articles is given actually, as well as in the form of percentage of the former price. The aggregate change shows a decline from 100 to 80, while in individual commodities, there are both ups and downs,—the latter, however predominating.*

* If we take only the percentage of the 1914 prices in the letter year (1934), and average them, the result would be a little higer, general but the tendency would be still closely similar.

In compiling Index Numbers, it is important to see that:

(1) The commodities selected are fairly representative of the community, both on its production and on its consumption side; or they must reflect correctly the elements or the purpose for which the Index Number is compiled. In the illustration given on p. 64 out of 10 articles, five at least represent the main produce of India; while of the remainder there are several which are produced in the country as well as imported from abroad to make up the requirements of the country.

(2) In addition to commodities, accounts must be taken of services also. There is no mention, in the above illustration, of railway or shipping freight rates, nor of house rent, nor of any other similar want of civilized man.

(3) Allowance must also be made of the quantity consumed of the several articles. It would needlessly complicate the Index, if 2 commodities are included in it, of one of which only 5 units are consumed, and of the other 5,000. There must be a certain comparability in the items making up the Index, and also in their prices.

(4) The period selected as the base must be normal- *i. e.*, representative of the general economic condition of the community; and conversely, the period to which the comparison relates must be free from disturbing factors, like a war, a famine, or an epidemic ;or allowance be made for such disturbing factors as may have had their influence during the period intervening. Thus, in the illustration given above, the change in the Fiscal Policy of the Government of India, from one of absolute

Free Trade in 1914 to that of Discriminating Protection, and Imperial Preference in 1934; has a vital bearing on the prices of sugar, steel and cotton piece-goods. In the same way, if any considerable change has taken place in the technique of industry, or the habits of the people,---and these affect the prices of the articles in question,---allowance must also be made for the same.*

(5) The Price to be taken should be the average, the mean—of the period taken as the base.† There is always a considerable difference between Retail and Wholesale Prices; and it depends upon the purpose for which a given Index is compiled as to which of these two sets of Prices should be taken. If the Index is to indicate a general change in the Cost of Living, Retail Prices would be unquestionably preferable; if, on the other hand, the Index is to show variations in the productive capacity of the community, wholesale prices would be better.

* "If a fall of price per unit be accompanied by a disproportionate rise in the number of units produced by the existing plant, due to increased efficiency, the fall of price may go with prosperity and greater profits, rather than with industrial depression and lower profits. By not regarding a general fall of prices as an evidence of the diminished total value of the product, but as a record of the changes only in the prices of units of those goods, many errors may be avoided." (Laughlin), *Principles of Money*, p. 145.

† "If our problem in an economic sense demands that the average obtained, when substituted in place of each term of the series, will yield an unchanged aggregate of units, then the arithmetic, and no other kind of mean, should be employed." (Op. cit., p. 149).

Unless all these factors are duly attended to or allowed for, the Index will be ineffective. Economists of repute are divided on the general question of the utility and validity of this device to measure the real extent of Price movements. But such as it is, the device will be wholly useless if these points are not duly attended to.

In one of the most famous Index Numbers, that of the *Statist*, the object is to measure changes of wholesale prices in the United Kingdom. For this purpose forty-five commodities of practically equal importance *inter se* were selected, and the period of 1867-77 was taken as the base. The average price in this period of each of these selected commodities was taken to be=100 ; and subsequent changes are expressed as percentages of that average, while for the whole year the simple average of this forty-five prices forms the index number for the whole year.*

If the movement of Prices under measurement, during any period, are of considerable magnitude, as the price changes, *e.g.*, between 1914-20, or again between 1919-33; or, if during the period under consideration radical changes have taken place in the organization of the economic system, of industry and commerce, or of the monetary systems of the world, or of the principal commercial countries therein, the measurement looses much of the significance that would otherwise attach to it in an ordinary period with normal variations.†

* These Index Numbers have now been recast, the average price in 1913 being taken as 100 for each commodity ; the totals are obtained by grouping together the separate entries on the same plan as in the original. Prof. Bowley writes, in the *Encyclopedia Britannica*, on this Index Number, "It is at once evident that the various prices have not followed the same course ; the extremes in 1920 were: house-coal, whose price rose only 49% in seven years, and Java sugar were the Price is 587%. This wide divergence of itself shows that the general Index Number cannot have great precision. The prices are the resultants of at least five forces, *viz*, the general inflation of prices, the conditions of supply and demand for the separate commodities, the control of supply, the control of prices, the change of quality." The Table of the *Statist* Index Numbers is attached.

† It is for this reason that the Board-of-trade has taken a new base in the United Kingdom starting from 1914, and the changes in prices are compared to this. Price variations, as measured by the official Index of each important country, are given in the Tables attached.

"STATIST" INDEX NUMBERS. AVERAGE FOR EACH YEAR

Average for 1913, *Taken as* 100 *in Each Case.*

	1919	1920	1921	1922	1923	1924	1925	1926	1927
VEGETABLE FOOD :									
Wheat:—									
English Gazette ..	229	253	229	148	132	155	163	167	155
American	205	253	202	143	130	148	171	161	160
Flour, town made, white ..	153	216	211	150	130	144	164	161	149
Barley, Gazette ..	278	330	200	147	124	172	154	132	154
Oats, Gazette	274	301	181	152	140	142	142	132	133
Maize, U. S. mixed ..	334	384	163	132	152	168	163	126	130
Potatoes, English ..	254	311	254	167	128	238	197	163	174
Rice, Rangoon ..	313	501	226	172	172	206	195	198	194
AVERAGE ..	255	319	208	151	138	172	169	155	156
ANIMAL FOOD :									
Beef: Carcass, London Prime.	200	231	215	164	147	152	148	137	130
Middling	220	255	224	167	152	155	150	137	127
Mutton: Carcass, London Prime	184	233	211	202	173	180	172	144	139
Middling	203	258	224	217	192	185	176	144	142
Pork: Carcass, London ..	233	306	221	184	162	127	154	179	155
Bacon, Waterford ..	248	311	232	189	148	138	167	169	133
Butter, Friesland ..	212	253	210	170	156	177	174	145	150
AVERAGE ..	214	264	220	185	161	159	163	151	139
TROPICAL FOOD :									
Sugar:—									
West Indian ..	402	610	205	158	268	246	171	175	173
Beet German ..	..	..	..	148	246	213	125	123	132
Java, Floating cargo ..	400	687	202	141	224	198	113	116	125
Coffee:—									
East India.. ..	180	183	149	149	145	188	190	191	177
Rio	215	210	119	140	104	161	186	168	135
Tea: Congo Common ..	270	..	87	172	220	182	157	156	135
Indian good medium ..	182	114	85	162	207	215	181	205	174
Average Import. ..	171	165	137	164	194	209	202	208	205
AVERAGE ..	300	432	162	152	203	197	157	157	151
ALL FOOD: AVERAGE ..	250	322	203	164	161	172	164	154	159

"STATIST" INDEX NUMBERS. AVERAGE FOR EACH YEAR— (*Contd.*)

Average for 1913 *Taken as* 100 *in Each Case.*

	1919	1920	1921	1922	1923	1924	1925	1926	1927
MINERALS :									
Iron;—									
Scottish pig	215	326	257	151	165	148	127	133	123
Cleveland pig	235	357	236	157	187	151	125	150	125
Common bars	249	366	247	145	153	161	153	148	145
Copper:—									
Standard	135	143	102	93	97	93	91	85	82
English touch cake ..	135	153	98	90	95	92	89	86	83
Tin, Straits	128	150	85	81	102	125	133	148	151
Lead, English pig ..	154	209	127	141	148	187	196	168	134
Coal:—									
Best Yorkshire house ..	211	149	150	160	151	128	138	141	107
Newcastle steam ..	293	330	187	159	181	143	106	105	96
Average export ..	331	572	250	173	180	168	144	134	127
AVERAGE ..	218	226	172	135	144	144	140	138	124
TEXTILES.									
Cotton:—									
Middling American ..	280	330	134	173	218	232	180	134	136
Bhownuggar G. F. ..	251	240	102	141	176	194	194	136	145
Flax:—									
Petrograd			331	279	245	353	271	191	282
Russian av. import ..	423	837	287	206	205	253	293	177	179
Hemp:—									
Manila fair roping ..	185	207	127	105	105	139	145	135	137
Petrograd clean ..	388	383	..	..	150	213	234	196	175
Jute, good medium ..	189	169	104	116	98	120	187	166	129
Wool:—									
Merino, Port Philip ..	372	444	177	217	243	297	228	203	211
Merino, Adelaide ..	338	337	122	180	214	268	183	172	184
Lincoln half hogs ..	183	178	69	79	97	153	139	121	124
Silk Textiles	236	351	241	261	220	213	164	145	140
AVERAGE ..	271	319	170	167	174	209	193	155	157

"STATIST" INDEX NUMBERS. AVERAGE FOR EACH YEAR.—(*Contd.*)

Average for 1913 *Taken as* 100 *in Each Case.*

	1919	1920	1921	1922	1923	1924	1925	1926	1927
MISCELLANEOUS:									
Hides.—									
River Plate, dry ..	182	167	78	74	76	81	92	83	99
River Plate, salted ..	206	192	93	93	86	91	93	84	110
Average import ..	198	233	111	93	95	100	115	108	114
Leather.—									
Dressing hides ..	187	223	129	125	120	117	118	109	118
Average import ..	211	370	240	187	163	176	171	185	192
Tallow, town	255	218	105	101	106	123	123	111	99
Oil.—									
Palm	197	198	105	98	103	114	115	101	97
Olive	..	..	..	..	134	161	149	161	207
Linseed	375	356	129	158	173	172	175	129	128
Seeds: linseed	306	345	159	166	171	178	177	130	191
Petroleum, refined ..	204	298	260	186	153	154	154	153	153
Soda, crystals	249	317	295	259	217	214	211	211	211
Nitrate of Soda ..	216	215	165	125	117	118	116	115	109
Indigo, Bengal ..	332	527	416	358	273	220	209	205	200
Timber.—									
Hewn : average ..	344	300	172	116	120	125	120	122	114
Sawn : import ..	369	416	249	187	208	193	195	170	171
AVERAGE ..	268	307	195	167	151	152	150	144	147
AVERAGE.—Materials ..	256	302	181	159	156	168	161	146	144
AVERAGE, food and materials	253	311	190	161	158	169	162	149	146
Statist—Number ..	242	295	183	154	152	164	161	150	144

Encyclopedia Britannica—14th Edition. Vol. 18. (Page 475).

Elaborate Indecies of production, trade, prices and consumption are nowadays prepared and published under the auspices of the League of Nations, which serve effectively to give a concrete, idea of the degree of prosperity or depression, prevailing in the world at large, or in any individual countries. The series of publications, particularly, relating to the prevailing economic Depression, and entitled the World Economic Survey, have an interest and importance all their own. Not only do they give a comprehensive view of the world economic situation, but supply and critically evaluate a mass of data which individual scholars in any country would find extreme difficulty in procuring for themselves. The explanations added about the index on each particular head of enquiry makes the study more easy to pursue, and more abiding in results when completed. In this work, the writer has freely availed himself of the material available in all such publications.

LECTURE IV.

PERIOD OF RECONSTRUCTION—1919-1924.

CHARACTERISTICS OF THE PERIOD.

In studying the course of Prices during this period, we must bear in mind its outstanding characteristics, which materially influence the course of Prices. Following as it did, a long, bitter, exhaustive struggle, in which almost every country of any importance in Europe, and also all over the world was engaged on one side or the other, the period commenced with a remaking of the Map of Europe, and therefrom of the whole world. The most salient characteristic of these post-war years is the increase in the number of countries, and consequently of the conflict of interests and ambitions, that dominated the political and economic life of a large proportion of the human family. Before the war came to an end, only 6 countries in Europe could claim to be neutral; while when the 5 Treaties of Peace had been finally concluded, the map of Europe was completely recast. Says Mr. G. D. H. Cole, in his *Intelligent Man's Review of Europe To-day*, (*p.* 127):---

"Before the war, there were five Great Powers, of approximately equal weight, in Europe—Great Britain, France, Russia, Germany and Austria-Hungary, with Italy as a doubtful sixth. Now Austria-Hungary has disappeared; Russia has vanished from the concert of Europe; and Germany though still a large State, has remained officially a beaten and partly a tributary foe. There thus remain two Great powers, with two of rather lesser importance. Against this, one most notice the increase among states of moderate size. Poland, Roumania, Czecho-Slovakia, and Yugoslavia have all joined the category of Spain; whereas against eleven small States, there are now sixteen, including four carved off Russia, the autonomous Irish Free State, and two which were the brains of the great Austro-Hungarian Empire, and now find themselves reduced below Yugoslavia in importance."

These States, with their changing policies and uncertain internal systems of government, made the European politics and economics a maze through which none could thread his way with certainty and safety. Their ancient affiliations or enmities, and modern alliances and combinations, led them to devise new policies to train and develop their resources, to perfect their natural or acquired equip-

ment, which cast new and unexpected difficulties in the way of realising the programme of reconstruction.

While these new countries were endeavouring to build up their newly acquired territories and resources, they had continually to face the menace of revolution within, and invasion or aggression from without. Their policy of internal development, or economic rehabilitation of their country was necessarily conditioned by their ability to provide a stable Government. Several of them have drifted, by force of circumstances,—like Italy, Spain, Poland or Germany, or by set policy,—like Russia,—into Dictatorship of one sort or another, suspending or perverting forms of Government to which the pre-war world had become accustomed; and, therefore, also the lines of policy which were considered to be orthodox and approved. Many,---like Italy and Russia,---abandoned altogether the orthodox notions about the place of foreign trade in a national economic system, or the utility of the cash nexus,---the meaning of the Price level,---in controlling the economic machine in capitalistic society. Because of these changes, the course of prices becomes erratic, and the general trend of economic development often difficult to follow or forecast.

Besides these fundamental difficulties, there was, of course, all the dislocation inherited from the War to face. The currencies all over the world were unsettled, exchanges fluctuating, productive organisation very much shrunk and in confusion. The legacy of the war,—in other, and less tangible, shapes,—had also to be liquidated. The more direct calamity of Famine, peculiarly severe in Central Europe, had to be guarded against by the stronger nations, whether neutrals or belligerents.

The burden fell principally upon the United States of America, which was also economically the strongest nation emerging out of the War. Instead of being a debtor nation, she became a universal creditor, the central money-market and clearing-house of the world. This change had also its reaction upon the world economy, as likewise the change in the distribution of age-groups in the population of the ex-belligerents. Their demand was changing, and their productive capacity had also changed,---both because of the direct wastage due to the hostilities, and because of the relative lack of adult manhood in the countries depopulated by the War.

I shall state in a moment the Problem of the period. Here, in order to concentrate attention on the central phenomenon we are studying, let me summarise the changes in the Prices in the several countries. [Base pre-war (1913 or 1914) =100.]

The main problem, in the first Quinquennium after the War, was: reconstruction and rehabilitation all over the world. The problem is not, of course, the same in all countries affected by the War directly; and much less is it so in countries not directly concerned in the War. There are, however, certain essential features of the problem, which the student of the period meets with in all countries affected by the war. I, therefore, propose in this Lecture, to consider these common features of the situation, and see how they reacted upon the general Price-level.

THE METHOD OF TREATMENT.

My enquiry in this Lecture will, it need hardly be added, be confined mainly to countries of Central and Western Europe, as being most directly concerned in the hostilities. Russia will, however, be excluded from the survey, as a special Lecture is to be devoted exclusively to that country. The conclusions derived from a consideration of the conditions in these countries will be applied to non-belligerent countries, or those in which the toll of the War was not quite so heavy or direct, *e.g.*, India, to show how far common currents ran through the economic life of the whole world. The method of treatment in this Lecture would

		1919	1920	1921	1922	1923	1924*	
1	United Kingdom	..	307	197	159	159	166	* Board of Trade.
2	United States	..	221	140	139	144	141	
3	France	..	..	..	..	..	..	
4	Germany	..	..	..	..	..	137	
5	Italy	..	..	517	529	536	554	
6	Holland	..	292	282	160	151	156	
7	Canada	..	244	172	152	153	155	
8	Australia	..	228	175	162	179	173	
9	Japan	..	259	200	196	199	206	
10	India	..	201	178	176	172	173	
11	Austria	..	..	..	..	..	..	
12	China	..	..	105	99	102	98	

*These statistics are compiled from the Statistical Year Book of the League of Nations,—1932-33.

be slightly different from the one indicated in the first Lecture. Without losing sight of the main tendencies all over the world, I would lay emphasis, in this Lecture, on the peculiar difficulties, the local conditions and circumstances, of the individual countries affected, by taking outstanding examples, instead of studying the general tendencies of the period, and their working in the world at large.

For its better appreciation, let us state here the problem as it appears, taken collectively. Every belligerent country, and many non-belligerents, had to shoulder in this period (1919-1924) a three-fold task.

(a) There was, first, the task of reconstruction of war-wasted regions, and replacement of the actual damage done to the property and productive organisation in these parts.

(b) Secondly, there was the need for reconditioning of the Industry and Trade diverted by the War, involving rebuilding of neglected normal industries and bringing them up-to-date; the repair of the plant and machinery in all other industries, revival of the country's trade or its restoration, and achieving a measure of harmony in the relations between Labour and Capital, which had been thrown into a new mould by the exigencies of the war.

(c) Finally, there was the problem of restoration of the national finances and rehabilitation of credit, which had suffered heavily because of the waste inseparable from war-time economy. The same problem comprised the restoration of Exchange parities that had been seriously displaced owing to the unusual strain caused by the War.

(A) RECONSTRUCTION OF WAR-WASTED REGIONS.

The damage done to these regions in the course, or as a consequence, of hostilities was of various kinds. Lands and buildings, factories and workshops, had been either destroyed physically, or so diverted from their normal function as to be utterly useless for the purpose for which they were originally designed. Normal economic organisation could

not function until this injury was remedied, losses replaced, and damages repaired.

France and Belgium, of the Belligerent countries, had suffered most in this way. Whole districts had been devastated, towns shelled out of existence, fields and factories destroyed by trenches and shell-holes-all directly resulting from the War. All the accessories of modern industry were likewise ruined. Banks and business-houses, roads and railways, factories and warehouses were swept away from the actual theatre of the war. In these parts, therefore, the entire economic life of the region had to be recreated.

The French and the Belgians sought to make good this actual material damage by means of the Reparations imposed upon their defeated enemy. In Germany, the chief of the Central European allies, there had been no invasion of territory; and so the actual physical loss and damage,—of the type that thrust itself upon the eye of the most casual observer in France or Belgium,—was not obvious. But Germany, too, had suffered this particular kind of damage from the terms of the Armistice, which involved the surrender of the German Fleet, and considerable deliveries of war munitions and railway-stock and material. The final Treaty of Peace had also imposed upon her a substantial loss of territory in Europe, as well as outside Europe in the shape of colonies. This not only crippled German productive organisation, but also reduced German markets. This was obvious, direct, tangible. It was justified on the principle of *Væ Victis*. The less tangible loss,—heavier in Germany than perhaps in her enemy countries,—in the shape of the perversion of normal peace-time industry to war purposes, and the loss of physical stamina and general vitality of the populace due to the privations inflicted by the Blockade,—without reckoning the loss of life and energy in the killed and the maimed,—may be difficult to express in monetary terms. But this loss reacts nonetheless seriously upon the general economic organisation of the country affected.

Austria,—that other considerable Ally in the Central European camp,—suffered even more heavily than Germany in loss of territory and population, productive resources, and necessary accessories of modern economic life.

On the other hand, this particular type of damage was not very considerable in countries away from the

scene of fighting; *e. g.*, the United States, Britain or her Dominions, or Japan. Hence we in India, for example, cannot claim justly to have suffered seriously from this source.

The problem of Reconstruction was not simply one of physical replacement of the wasted land, or lost property, or damaged material. In belligerents, like Britain, who had not had their territory invaded by enemy forces, the problem of Reconstruction did not take the shape in which it was pressing upon the attention of those countries who had been invaded. It was a matter of economic restoration, which took the same form in all countries in its ultimate analysis. As already remarked, even in Germany,—where there had been, during the currency of the hostilities, no actual invasion,—the war-time necessity had compelled the country to live so much upon its accumulated reserves of the past, that the question of Reconstruction or replacement in Germany was practically the same as in France or Belgium. The only complication, peculiar to Germany after the War, was the burden of the Reparations.

In so far, however, as the problem is one of replacing the plant, machinery or material destroyed by the War, the main aspect which interests us in this series is financial. But along with financial considerations, we must also note reaction upon the price-level of a country, due to the financial shifts and contrivances adopted by its Government for reconstruction purposes.

How was this loss or damage to be made good? Who was to pay for it? and how? The current resources of all communities faced with this problem were, it is needless to add, utterly unequal to creating that surplus of new wealth, over the immediate demands of consumption in the community, which would serve as Capital for financing the programme of Reconstruction. Even in a country, naturally rich and well endowed,—as France, where hope could be reasonably entertained of the local resources proving sufficient to produce the needed surplus of Capital,—the time factor was irresistible. The demand for Reconstruction could not wait, until, in normal process, a local surplus of Capital was forthcoming for the task. And because the people,—in France particularly—were led to expect that someone else would be forced to make good their losses, what little incentive there was in the country itself to speed

up the work of Reconstruction was undermined. They had made themselves believe, by dint of repetition and propaganda, that Germany alone was responsible for the War; and that, therefore, it was but right and proper that she should be made to pay for her crime against mankind and her outrage upon modern civilisation. France,—a most logical and realistic people, if ever there were one on the face of this earth,—never paused to think that this was an absurd expectation. In the first heat of the fever of victory, none of her Allies and Associates drew her attention to this hiatus in her reasoning,—that Germany had her own War-wastage to make good; that she had exhausted her reserves in the course of the War; that even the small surplus remaining at the end of the War had been absorbed by the Armistice, and by the task of feeding and keeping alive a nation of 65 million souls during two or three years of internal revolution and external aggression; and that, under those conditions, Germany could not possibly pay. Mr. J. M. Keynes has lucidly pointed out all this, and more in his classic work on *The Economic Consequences of the Peace.* But no one in England or elsewhere had the time, or the courage, or the honesty, to face these facts, and point them out to the erstwhile ally. France, therefore, insisted, in the Peace of Versailles, that a heavy sum,—eventually fixed at 132,000 million Gold Marks,—should be fastened upon Germany as the liquidated war-damage done by her armed forces to the Allies' lives and property; and a *modus operandi* for exacting these payments was also laid down at the same time.

The various series of Reparations Bonds, however, could not be met by Germany, when the time for payment, as fixed in the Treaty, came. France had provided against this contingency. But the "sanctions and guarantees," provided against this default by Germany, were even worse than the default itself. The manner in which France sought to exact these Reparations,—and her refusal to shoulder her own obligations to her own Allies for war-time loans, unless she was aided in recovering the Reparations from Germany,—made the first breach between her and her closest war time Ally,—Britain (1923).

Britain, for her own reasons, could not tamely acquiesce in the French policy and methods for exacting Reparations from Germany. The fundamental objective, in waging this War was different in Britain and

in France; and hence their difference in outlook and policy regarding Reparations. If France succeeded in exacting a substantial War indemnity from Germany,—somewhat in the form provided in the Treaty of Peace, Britain's foreign trade,—on which her whole economic life rested,—would be ruined. While the object of France in waging the War was the political downfall of Germany and the destruction of her military menace, the object of Britain in the War against Germany was to destroy, not merely the German Navy but the still more formidable German competition in world markets. A late comer in modern industry and international finance, Germany had made herself a formidable rival to British commerce and British financial supremacy. After an exhausting War of four odd years,—at the end of which she claimed a smashing victory,—Britain had no desire to see her trade lost, and her financial supremacy endangered, simply that France might satisfy her desire for revenge, or assure for herself a permanent, secure frontier and unchallenged political leadership on the whole European Contingent. As usual, however, with British writers and statesmen, they discovered quite a respectable number of high sounding platitudes and altruistic arguments to justify their breach with France, the moment they discovered it would not suit their book to give France a free hand in exacting Reparations. The difference between Britain and France, during the whole course of their post-war relations, is, you must understand, economic; and no amount of such platitudes could conceal that fact.

That Germany was unable, economically speaking, to meet the bill against her, was no concern of France; for what she really desired, by holding at the head of Germany, this pistol of Reparations demand, and the "sanctions" in the event of its non-fulfilment, was the political ruin of Germany, the destruction of her influence on the Continent, the removal of her menace to France's security and hegemony. That is, why France helped to resuscitate Poland, and made that country drive a veritable wedge through the heart of Germany; that is why she consented to the dismemberment of the Austro-Hungarian Empire, and inserted clauses in the Treaty against any subsequent amalgamation of the two branches of the German-speaking peoples. With these intentions, France was not so much concerned in getting actual Reparations to rebuild her own

War-wasted regions, as to make this demand a means of crippling and ruining her traditional rival on the Continent.

But, even if Germany was able to find a surplus from her own resources, at all equal to the Reparations demands of France, she could only make the payment,—she could only effect the transfers of such values from herself to France,—by means of trade; that is, by encouraging and increasing her exports in the world markets. This necessitated German industry, and her productive organisation generally, to be so reconditioned, as to function efficiently and provide this surplus. Now, it requires no deep penetration to perceive that, in proportion as German exports grow in the common mrkets, the field for British wares must contract. It is of far greater importance to Britain, living on her foreign trade, that her markets should be preserved and maintained, than that the Reparations should be paid to France. To mark her sense of this complication, she offered, through the famous Balfour Note, to modify her own claims for War Debts against her Allies to only such amounts as would, in the aggregate, suffice to enable Britain to pay her debt to America. If France and Belgium could agree to this line, and restrict their demands for reparations to what was strictly needed for their local reconstruction work, Britain might support them in seeking such reduced payments from Germany. For then they would go directly to the afflicted regions, without underbidding her in the world-markets. Such reduced payments, spread over 50 or 60 years, might be innocuous to British trade; and yet prevent Germany from building up such a surplus as to be once more a source of anxiety to Britain. At the same time she agreed to her own Share of Reparations, if and when collected, to be fixed at 22%; and gave further earnest of her desire to expedite Reconstruction by concluding her own funding agreement with America, on fairly liberal terms, in respect of the War Debt (1923).

But these concessions were of no meaning to France seeking the means to rebuild her war-wasted regions. They were of still less significance in her political demand for security. The British concern at the growth of German markets abroad, and the consequent stagnation in British industry and the growth in British Unemployment had likewise no terror for France, since her own industry was amply protected, and her local as well as colonial markets adequately assured. France's economic system is more

balanced than that of Britain or Germany; and rests still on the principle of self-sufficiency. Britain's unwillingness to join France in her expedients to exact the full pound of the Reparation flesh, appeared to the latter as of a piece with the traditional infidelity of her neighbour across the Channel; and she, therefore, had no further hesitation about acting on her own, when Britain refused to support her in using the "sanctions" provided in the Treaty (1923).

Britain was, accordingly, almost from the first moment when French intentions became unmistakeable, against the invasion and occupation of the Ruhr to exact this pound of Flesh. The adventure lasted over a year, but ended as a sad failure for both. The problem of Reconstruction, therefore, became complicated in France and Belgium,—where they had depended upon receiving the wherewithal for carrying out the Reconstruction work from Germany,—by the failure, as it were, at the source.

In Germany, too, it was rendered impossible of solution by the same reason. So long as the sword of Reparations unpaid hung on her head, she could not, even if she really had a surplus, divert that surplus to reconstruct her own industry, and make good her own losses and damage. For any effort in Germany in that direction, in the years immediately following the War, there must be help from outside,—capital advances by the United States, the only surviving banker for the world. Hence, when at last France had bowed to the inevitable, and Germany perceived the unwisdom of passive resistance, an agreement was arrived at, (the so-called Dawes plan of Reparations payments) which scaled down considerably the total of the Reparations, reduced the payments in the initial years, established a machinery for effecting the transfers, and advanced Germany on the way to her own reconstruction by an international Loan (1924).

The case of France and Belgium on the one hand, and of Germany on the other, would suffice to explain to you the complications of the problem of post-war Recontruction. I will not waste more time in dealing with the case of Austria, which was frankly insolvent. She has had to be sustained by frequent doses of international financial aid. Other countries of Europe,—new or old,—had the same problem of Reconstruction in one form or another. And they all tried eventually to solve it by recourse to

Borrowing. For when Reparations are impossible, and a local surplus of production over consumption unattainable,—as was the case in most of the war-worn countries of Central and Eastern Europe,—borrowing was the only way to recondition their economic life.

In some of these, the problem of Reconstruction was really a matter of national rebuilding, especially in the new states created by the several Peace Treaties. Their normal economic ambitions had been diverted or suppressed in the older Empires out of which they were carved. The task of national rebuilding differs, essentially, from the task of a mere reconstruction or restoration to the normal place of what had already been in operation. While the former cannot dislocate very materially the economic life all-around the countries in which such reconstruction or restoration was being carried out, the latter might materially affect the economic life and relations all over the world, if the units concerned in such national rebuilding,—of the type that Poland, or Russia, or the Succession States are carrying out,— are of considerable size and population.

As, however, we shall have occasion to discuss this aspect of the problem later on in this Series, it is unnecessary to labour further upon it at this stage. Suffice it merely to add that the reaction of all these projects on the Price-Level is direct and material, and hence the need for a closer study of the problem and its solution.

What was to be the Agency to carry out the programme of Reconstruction from borrowed funds? Was the State to take the initiative, or private enterprise? In the former, there may be a reasonable hope of a well-planned, well-ordered, simultaneous reconstruction. In the latter, each individual affected would be left to make good his own loss. But borrowing on such a scale, and for such a purpose, has its own dangers to be guarded against. For, not only would this borrowing have to be done,—at least for a very large slice of it,—in foreign countries; but it would also have to be made good from the future wealth, if and when available. Borrowing abroad, especially under government agency, has its own disadvantages. It involves a degree of surrender of the doctrine of absolute national sovereignty, thanks to the contractual obligations incurred to foreigners lending the capital; and prevent that unobtrusive adjustment of rights and obligations between debtors and

creditors, which is so smoothly affected by the tax systems and currency regulations in modern countries. Borrowing abroad, moreover, sets up a needless and difficult complication regarding the level of prices, in the lending as contrasted with that in the borrowing country; at the time of raising the loan, as contrasted with that at the time the loan is due for repayment. The loan contract of this kind would necessarily have to be long-term. But the possibility of creating and maintaining for a number of years such a surplus in the future, even when the borrowed funds were employed exclusively in economic reconstruction or replacement of genuinely productive assets,—which has not always been the case in countries suffering from such a chronic deficit as the European nations at the end of the world-war,---is extremely problematical. The burden of the Debt thus incurred would have to be expressed and discharged in terms of the common medium of exchange.--the international standard of payment,—Gold. The prices, however, at the time the debt of this sort had to be incurred (1919—21) were at their peak. The real value of the money borrowed for reconstruction, in terms of commodities, would thus be barely a third of the pre-war prices of the same commodities. On the other hand, when the actual payment on account of the debt thus incurred fell due, the price-level was considerably lower, thanks to a steady process of deflation in pursuit of restoring the parity of international exchanges. With the price-level shifting downward, the real burden of the Debt thus contracted increased in proportion, And the increase was more burdensome than appeared on the surface, wherever the borrowed funds were used to make up the Budget deficit.

All this rests on the assumption that the general economic system in the countries affected underwent no other radical change in the meanwhile. As a matter of fact, however, there was every indication, even in the years immediately following the War, that, thanks to the experience gained in the War, thanks to the impetus to inventive genius afforded by the exigencies of the struggle, the post-war economic situation would soon be radically transformed, And when it was so transformed, both the ability of the country affected, and the size of the surplus available to pay off the creditor, would be different from what had been originally estimated.

Given the conditions of Post-War Europe, such borrowing had mainly to be effected on the credit of the national Government. In strong countries, like Britain, and to some extent France, there was no need of borrowing abroad after the War, at least on Government credit. The work of Reconstruction in such countries was, accordingly, left to private enterprise, which levied its own tax on the ultimate consumer in the shape of high prices. Prices were kept high over three times the pre-war level in most European countries by the post-war boom caused by such individualist programmes of Reconstruction. That boom was fictitious, short-lived, and disastrous ; and was responsible for a large degree of avoidable distress when it suddenly came to an end in 1922. Prices in Britain, for instance, sloped in 1922-23 by something like 100%, causing serious dislocation in industry, depression in Trade, and unemployment.

In countries, however, where economic strength was not so great, Reconstruction or national rebuilding had to be carried out mainly through state enterprise financed by foreign loans raised on Government or private credit.*

The reaction of such borrowing, assuming it was carried out, upon the general price level, was complicated, but undesirable in the final analysis. Borrowing at home or abroad must inevitably lead to an inflation of the price-level, when the borrowed funds were employed,—not in an immediately productive purpose,—but rather in a replacement of property or enterprise destroyed by the war. For on property or productive assets thus destroyed by the operations of the War, there are claims for support and maintenance of factors of production which had built up those assets.

* The following figures give the total foreign lending *in million Dollars of Two lending countries.*

	1919	1920	1921	1922	1923	1924
U. K.	221·4	219·6	445·4	598·4	622	592
U. S. A.	455	874	789	874	109	522

Of the borrowing countries in this period, we can find satisfactory information only about Australia ($407 million), and Germany $421 million between 1923 and 1924.

These figures are compiled from the League of Nations Publication called *Balance of Payments and Foreign Trade Balances* 1911-1925. For Britain, the figures represent the gross capital issue, for America only the net balance of foreign investments of capital. Commercial credits and short term operations are excluded from these figures.

These claims are not destroyed because of the War. A French farmer or factory owner, whose farm or factory was destroyed by the War, might have already obligations in respect of his farm or factory, which are not liquidated because of the war. There is no insuring against such contingencies as damage by actual warfare. Though France was, in the first post-war years, receiving and registering freely the claims of her citizens because of such losses,—with a view to present the whole of this Bill against the Reparations account,—it was never really deemed likely that such amounts would be forthcoming from Germany. The borrowing, therefore, by the State, for such a programme of Reconstruction had to provide for a double set of obligations; *viz.*, those already existing in pre-war times in respect of the property destroyed, and those now created for replacing the destroyed capital. But would the replaced property or assets yield enough surplus to meet this double strain? Would the State be able to raise, by way of additional taxation, from such reconstructed assets or regions, enough to meet this debt burden, especially when it was owing to foreigners? Herein lay the main difficulty of this problem of Reconstruction from borrowed funds.

The result is not materially different even if borrowing has been carried out, in the first instance, by private *entrepreneurs*. It is not so much the status of the person borrowing, as the object for which the borrowed capital is eventually employed, that proves decisive on this point. Borrowed funds have an irresistible tendency to be used recklessly* And borrowing in days when prices were three times the pre-war level,-- in France and Germany and Italy much higher, while their local currency had lost all stable relation to the international medium of exchange,- is apt to prove disproportionately onerous, when, as the result of the production raised by such capital, prices have fallen sharply, and the date for the repayment of borrowed funds arrives.

Luckily, the principal countries affected in this matter were able,-- particularly France, and Belgium thanks to

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*This is not the same thing as really productive borrowing, without which no modern community, and no economic enterprise, can hope to exist. It is better, indeed, than that other form of borrowing, *viz.*, for carrying on a war. But the difference is rather a difference of degree than of kind; and I think it is not too much to sound a note of warning even against this kind of borrowing.

France,---to supply much of their own immediate needs from their local surplus. France is a land of the petty bourgeois and the peasant proprietor, so frugal and thrifty, that her secret reserves are unknown to anybody even to-day. What the French people cannot find at a pinch, when their national existence is at stake, is not worth finding. So, while France carried out a rapid and thorough programme of reconstruction, mainly from her own resources raised by domestic loans, secured on the hope of making Germany pay eventually; while France even helped her Allies and satellites in Europe in their projects of reconstruction on the same somewhat airy security,* Germany and Austria, the leaders of the opposite camp, were frankly unable to meet their current needs from their current resources, let alone undertaking plans of their national reconstruction, and still less shouldering the burdens of Reparations.

In Germany, the tale is a little different. Before the War she was the third richest nation in the world, if her total economic equipment and her rate of material progress were duly allowed for. But the War had strained all her resources to breaking point, exhausted her reserves, and destroyed her economic organisation. It had, at the same time, created new burdens and handicaps, which further reduced her capacity to meet her obligations. There was internal revolution, and the imminent danger of external aggression, if the impossible demands for Reparations were not met. Germany signed the Versailles Treaty, under protest and compulsion; and framed the Weimar Constitution for the republican Reich, which promised her a breathing space by putting an end to domestic unrest. But even after the surface difficulties had been overcome, the situation remained gloomy in the extreme. The Reparation demands, when the final total was made up and the bill presented in 1921, were impossible to meet; and France was in no mood to consider and allow for the difficulties of Germany. Ruhr was invaded, and Germany replied by a programme of sullen and passive resistance, which was ruthlessly, but at a tremend-

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* CAPITAL ISSUES IN FRANCE (in thousand francs)

1913	2,638,000	1922	14,272,000	1925	3,689,000
1920	12,994,000	1922	10,697,000		
1921	10,680,000	1924	6,775,000		

ous cost to themselves, put down by the French. The experience, however, of this adventure was enough to convince the most intransigeant Frenchman that the game of forcible exaction of Reparations from a modern people like the Germans was not worth the cost it involved in blood and treasure.

Germany had, in the meanwhile, been carrying on her internal administration by an unrestricted use of the manufactured currency, every time that the Budget failed to balance; and the Budget was all through this period utterly unbalanceable. The endless increase in the volume of currency naturally manifested itself in prices rising like a rocket. Capital, such as it was left in Germany after the War, fled the country. The Mark was, by these forces acting upon it, still further depreciated, in spite of the steadying action of foreign speculators, who believed against all evidence that Germany would not default on her currency, and that the Mark would not go the way of the Russian Rouble, or the Austrian Crown. Their hopes were doomed to disappointment; and after a while, even speculators desisted from investing in a country so exposed and defenceless as Germany. There was thus left no limit to Currency inflation in Germany, and consequently no bounds to a rise in the price-level in that country.* Marks were quoted on the Exchange markets of the

*" At the end of the War, they (prices) reached four times the pre-war level; in 1920 nearly fifteen times, and in 1921 over nineteen times. The average for 1922 was 34,000 that of 1913, and in 1923 price-levels became as fantastic as foreign exchange quotations, and the official index recorded a figure of 16,620,000,000,000 as compared with 100 in 1913". cp. G. D. H. Cole. *The Intelligent Man's Review of Europe To-day*, p. 265.

Statististical information about Germany in these years is either unavailable or unreliable. The following figures of the Foreign trade (including imports and exports of merchandise and specie) and of revenue and expenditure are compiled from the League of Nations Statistical Year Book 1926.

	1913	1920	1921	1922	1923	1924	1925
Imports	11,206	99,371	78,670	6,200	6.161	9,265	13,146
Exports	10,199	69,703	66,677	3970	6,116	6,585	8,838
Revenue						7857.2	8465.5
Expenditure						7793.8	8233.3

world in terms of astronomy, rather than any more mundane calculus. It was only when France seemed tired of her insistence upon putting into operation the "sanctions" provided by the Versailles treaty, and displayed a disposition to be reasonable in the matter of the Reparations, that German financiers could make an effort to rehabilitate the Mark,—of course by wiping out the debt incurred for currency reasons in the period of such unbounded inflation, and refusing to pay, except in the utterly discredited mark, the obligations incurred during those days.

The moment, however, that there appeared the slightest chance of the Reparations tangle being solved, even if temporarily, the German statesmen and financiers succeeded, as though by magic, in restoring credit, the exchange parity of the new Mark currency, and a tolerable equilibrium in the national Budget. The period of Reconstruction is thus occupied in Germany by this struggle against the immediate consequences and entanglements of the War ; and real reconstruction had, therefore, to wait for the next period.

In Britain, the problem of reconstruction was, as already remarked, not of the character we find it to be in France, Belgium or Germany. Her industry had no doubt to be reorganised to fit into the peace-time needs; and her commerce had to be revived. But these did not demand the immediate attention of her statesmen and financiers that France or Germany had demanded from their financiers. Britain's credit had been strained by the War ; her currency had depreciated ; her debt had grown enormously ; and the financial equilibrium in her Budget had been lost. These were questions,—not so much of bodily reconstruction, as of financial and economic rehabilitation, which could be more easily attended to, especially in view of Britain's greater strength and stronger economic position. We shall, therefore, consider Britain's problem under the 2nd of the leading tendencies and salient features of the period I am reviewing here.

II. *RE-CONDITIONING INDUSTRY.*

The *Second* problem in this period was that of *reconditioning the Industry,* reviving trade, and restoring the general economic system dislocated by the War. This was a problem common to all the countries directly affectad by the war, or even the neutrals. The War indust-

ries had to be scrapped, and the capital and labour engaged therein had to be transferred to the more normal occupation. The mere problem of effecting such a transition was taxing to the utmost the local political genius. Hardly any country effected the transition without further dislocation, further distress and misery, which were reflected in an unprecedented rise in prices in the years immediately following the War.

For you know that the level of prices was higher in 1920 than it had been a year or two earlier, when the war had been ended. This rise in prices was due mainly to the effects of currency inflation to meet Budget deficits, and the repeal or removal of those measures of international or local control and regulation of the world's Exchanges, which had a most steadying effect on the price-level. But these were deemed to be unnecessary the moment the war came to an end. America was the first to abandon these artificial controls and regulations; and other countries followed suit at their convenience. Because exchange was no longer under control, and because individual currencies were exposed, more than ever before, to unrestricted inflation to meet the chronic budget deficit of post-war years, the price-level could not but respond. Even if the inflation took place only in one country,—and some measures of inflation happened in all countries*,—its reaction upon the world price-level was inevitable, the moment international trade and finance was deemed to be free from the war-time impediments.

The process of industrial recondition was thus made difficult by economic as well as financial conditions. A minor difficulty in the post-war process of industrial revival was: (*a*) the reorganisation of industries mainly dependent on hostilities; (*b*) the adjustment of new industries born of scientific discoveries and inventions to the normal life of the community; and (*c*) the speeding *down* of those older industries which had been working at high pressure because of the War demands.

All factories devoted to naval and aerial armament and munitions supplied examples of the first category. They could not, of course, be scrapped

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* Statistics relating to currency inflation and Price-level during 1919-1924, in 7 leading countries of Asia, Europe and America.

Statistics relating to Note Circulation, Gold Reserves and Bank Deposits

COUNTRY :		1913.	1920.	1921.	1922.	1923.	1924.	1925.	1926.
America									
Canada	(1)	116	242	190	184	187	177	176	190
	(2)	115	101	84	132	117	142	138	131
	(3)	1059	2122	1971	1840	1887	1954	2015	..
U. S. A.	(1)	*3447	5645	4707	4733	4951	4993	5008	5001
	(2)	1924	2929	3657	3933	4247	4547	4409	4502
	(3)	20114	41615	38590	41076	44191	47624	51905	..
Europe									
Germany	(1)	2902	81388	122500	1295231	2274	3891	4626	5080
	(2)	1170	1092	995	1005	467	760	1208	1831
	(3)	4852	60214	111274	1590630	1063	3572	4530	..
France	(1)	5714	37552	36417	35953	37763	40604	49993	52449
	(2)	3517	3552	3576	3671	3676	3681	3684	3684
	(3)	5957	17658	17137	18307	19786	19571	26046	..
Italy	(1)	2782	22275	21754	20560	19956	20870	21450	20133
	(2)	1376	1478	1511	1545	1537	1550	1553	1563
	(3)	1715	16047	17224	12467	12117	14416	14873	..
United Kingdom	(1)	34·6	486·4	438·4	404·2	411·0	403·9	391·4	387·2
	(2)	35·0	128·3	128·4	127·5	128·0	144·6	151·1	..
	(3)	1070	2549	2576	2406	2353	2338	2321	..
Asia									
Japan	(1)	426	1639	1764	1717	1772	1688	1518	1393
	(2)	130	1116	1225	1215	1208	1201	1155	1127
	(3)	1603	7105	7812	7903	7870	8176	8835	..

The Figures are in the currency of the country concerned, and in milllions. (1) Represents the Bank or State Notes in Circulation ; (2) the Gold Reserve in the country against that Circulation ; (3) The Bank Deposits of all kinds in the country. These statistics are compiled from the Statistical Year Book of the League of Nations, 1926.

altogether and abolished permanently. But they could not also be maintained at their war pitch of production. Labour and capital invested in these had, accordingly, to be diverted in a great measure; while the reduced demand for their products was able to keep these industries going only so long as the artificially high prices prevailing in the immediate post-war years all over the world permitted such a course.

The second classs of industries, whose readjustment to normal times was even more necessary in a properly organised system of economy, comprised artificial silk, radio appliances, cinema and automobile, which before the War were either unknown, or but just coming into existence. The fictitious prosperity of war-time had created a demand for these products, which must decline in the first flush of demobilisation, and the consequent cessation of high incomes for a large section of the community in every belligerent country. These new industries,—and countries, like Germany, where they had been living on substitutes all through the latter part of the War, showed a large number of such new industries---could not, indeed, be abolished. They had, in fact, a growing demand before them, when once the dislocation due to the post-war boom was over, and demobilisation completed. But to keep them on their feet during a period of transition, and make them husband their resources while post-war reconditioning of national economy was in progress, required a degree of forethought which the uncertainties of life engendered by the War had rendered impossible.

Finally, all the old industries had received a stimulus from the War demand,---some of them because they directly contributed to the War, and others because they rose in sympathy,---which would no longer be when once the War had come to an end. If they had added to their capital burdens,---as had happened in regard to the Textile Industry in India or in Britain; or had expanded their scale of operations, they must re-order their works policy and sales programme to suit the normal peace conditions. The intense, but short-lived, post-war demand for making good the wastage and loss in such industries as railways, ships, *etc.*,---this also happened most prominently in India during the period under review—would cause a boom and a rise in prices, which must inevitably be followed by a reaction more intense than the boom, and more lasting.

Finally, incidents like the sales of surplus stores by the War departments of most countries—many noteworthy examples could be furnished in the post-war history of India as well as Britain—tended to depress prices or disturb the normal course of economic forces, which those concerned scarcely noticed. All this is clearly reflected in the statistics of prices given elsewhere in this chapter.

There were also the difficulties, in this part of the problem, arising out of the very nature of the task. In seeking to recondition and restore a war-worn country's industry, what were those responsible for the programme of reconditioning to aim at? The goal held before most if not all of the reconstruction programmes was a return to the pre-war level and basis, assuming that that level and basis represented the normal place of an industry in the world economy. They overlooked that the war had effected a silent revolution in the system of world economy, since many an undeveloped country had obtained during the war that adventitious aid to her own industry, which had aroused vast ambitions for industrial development in those parts.* They had just realised their own possibilities, which, they felt, given a fair trial, could be soon realised to their fullest and legitimate extent. These countries, therefore, shut off their own markets to the products of the European industry, and sought to build up within their own borders the corresponding industries with a view to supply at least their own local markets. The European aim, particularly in the more advanced industrial countries like Britain or Germany, in the programme of post-war reconstruction, to restore the pre-war level, was, therefore, soon discovered to be misleading, in regard to those pre-war staple industries in which these newly awakened national ambitions for the industrial regeneration of communities hitherto undeveloped created an unexpected and formidable obstacle.

This obstacle was the more formidable, since even nearer home, the new political entities that had been called into being by the Treaties of peace displayed corresponding ambitions in their own behalf, and so shut out their markets also from European competition from the more deve-

* Statistics of World production and commerce by countries (1919-24).

Production Indices in Terms oi 1913 Values,

—	1913	1923	1924	1925	(in million gold Dollars) 1913	1923	1924	1925
(*a*) Eastern & Central Europe—								
Excluding U.S.S.R.	100	78	86	100	5540.7	4345.2	4738.2	5527.9
Including U.S.S.R. ..	100	77	84	102	8518.5	6562,7	7126.8	8661.5
(*b*) Rest of Europe	100	98	103	109	5166.1	5045.9	5337.1	5630.2
Europe (excluding U.S.S.R.) ..	100	88	94	104	10706.8	9391.1	10075.3	11158.1
,, (including ,, ,,) ..	100	85	91	104	13684.6	11608.6	12463.9	14291.7
North America	100	127	118	127	9022.5	11447.2	10686.3	11432.8
Caribbean	100	152	169	162	615.7	933.7	1041.5	994.4
South America	100	128	121	130	1826.7	2342.0	2206.2	2380.5
Africa	100	125	136	143	850.8	1061.8	1155.5	1215.9
Asia (excluding U.S. S.R.) ..	100	115	122	127	6937.6	7982.3	8491.7	8829.9
Oceania	100	107	123	118	597.0	641.7	735.7	706.8
World	..	..	..	..	33534.9	36017.3	36780.8	39852.0
General Index	100	107	110	119				
Food-Stuffs	100	104	103	112				
Raw-Material	100	113	119	130				

loped and industrialised of the European countries themselves. And the rivalry of Japan and America, even in the face of these impediments created by the nationalist ambitions of the new and older countries, was another no less formidable handicap in the programme of Reconstruction and industrial Reconditioning in the more advanced industrial communities specially interested in world markets.

Compared to these difficulties, the purely local difficulties of making a transfer of Labour, and providing Capital for the reconditioning of British or German industry, was insignificant. In itself, however, that difficulty also was not contemptible. There seems, however, to have been very little perception of the need for a proper co-ordination and regulated transfer of labour and capital from war-time to peace-time industry. Individual initiative and the anarchic search for private profit were left to effect this transition without any systematic plan for the national reconstruction, without any guidance from the central authority.

This was particulary the case in Britain. Because each industry and even each enterprise was left to shift for itself, there followed a re-employment of labour that left vast gaps, created the modern problem of mass unemployment, led to the institution of the Dole, brought about a loss and shrinkage in the purchasing power, but indifferently concealed in the policy of deflation carried out about the same time, that led to such a rapid and heavy fall in prices in 1922-23.

Of all these incidental consequences of this post-war economic anarchy, perhaps none was so pregnant with mischief as the re-absorption in normal industry of Labour released from war-work. The transfer of capital from war-industry to peace-work was not so difficult, partly because the bulk of the capital thus engaged was public money or under governmental control. The transition was, therefore, effected by some sort of an orderly programme which was wholly lacking in th case of Labour. In the later stages of the War, vast masses of humanity had been conscripted, either for actual hostilities, or for war-work behind the lines. These wokers had no occupation when once the war was over. Their old places had already been filled ; and, in the new ones available, they had to face

a heavy competition from younger men, or from emancipated women. Besides, their own tastes had changed, and their expectations of what was due to them enhanced. Thanks to the hardening effect of the constant spectacle of sudden death, their habits of thrift and providence were at the same time, greatly undermined, if not lost altogether. It was inevitable that discontent should be rife among such material. Add to that the spectacle of a successful socialistic revolution in Russia, and, for a time at least, in Italy, Hungary, and other European countries; and you can understand the crying need in countries like Britain to provide on a national scale and in a systematic way for the unemployed. But even with a radically re-drafted National Insurance programme, the volume of Unemployment, and the consequent distress grew in all war-worn countries; and no small proportion of the sudden collapse in prices in 1921-23 was due to this lack of purchasing power in millions upon millions of unemployed adult citizens all over the world*. The relief of their distress by means of the Dole in no way helped to increase the aggregate purchasing power of the communities affected.

The problem of recovering the markets for the re-conditioned industry was of the same *genre*. In proportion as the corresponding industries established in regions which had, in pre-war times, been good markets for European goods; in proportion as, even in Europe, the local ambitions of the newly made countries stood in the way of their proving good customers to the industrialised countries of Europe; in proportion as the purely local difficulties created by the increased labour cost of manufacture rendered competition more difficult every day, while the rivalry of Japan and America was challenging, ever more energetically, the European command of undeveloped markets, the problem of recapturing the old markets was exceedingly difficult and complicated.

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* Statistics of cost of Living (1919-24)

Index Number of Wages are not available before 1927 in the sum convenient form.

Index Numbers of Cost of Living.

	India	Canada	U.S.A.	U.K.	France	Germany	Italy
1914	100	100	100	100	100	100	100
1919	186	155	199	215	238	..	286
1920	190	190	200	255	341	..	280
1929	177	152	174	222	307	1926	441
1922	165	146	170	181	302	1250	494
1923	153	146	173	171	334	3765	487
1924	157	143	173	171	366	126	512

III RESTORING NATIONAL CREDIT AND FINANCES.

The third aspect of the problem of post-war Reconstruction,—*viz.* the rehabilitation of the National Finances, restoration of the national credit, and stabilisation of the international exchanges, was common in the belligerent as also in the non-belligerent countries. The problem differed, if at all, in degree rather than in kind. In the years immediately following the war, national finance in almost every country showed a deficit.* A considerable proportion of this deficit was due to the extraordinary charges created by the liquidation of war liabilities. But the bulk of it was really a permanent burden due to the war. Measures of taxation, equal to meet deficit on such a colossal scale, were not possible even in the richest countries, at a time when their industry and people were suffering from war exhaustion. In these countries, however, the aim of restoring equilibrium was more energetically carried on, and comparatively earlier realised. In the rest of the war-worn countries, outside Britain and the United States, the restoration of budgetary equilibrium was never seriously attempted all through this period, for the simple reason that it was utterly impossible, short of a total bankruptcy and an absolutely clean slate to start a new regime upon. Even so, except in Russia, where they signalised the new regime by a frank and open repudiation of the Tsarist debts, and otherwise inagurating a system of national economy radically different in conception and design from the prevailing bourgeois systems,--the war-worn countries, like Austria or Germany, were never able quite truly to restore their financial equilibrium on a pre-war level. The depreciation of the local currencies had carried them, even in the case of the Sterling, to something like a third of the pre-war level; while in France, the franc was falling, if not as meteorically as the German mark, certainly at a rate and to an extent that no one would have deemed possible in the case of such a sound, thrifty, and prosperous community as the French.

Altogether, in belligerent countries, thanks to their depleted resources, and thanks also to their urgent need for more capital to make good the wastage and damage of the war,

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* For the relevant Financial Statistics see ante. foot note p. 21. and p 87.

the Exchange parity could not be restored; and if restored, could not be maintained at the pre-war level, without a disproportionate harm to the national economic system. This was soon discovered by England, even within this period of reconstruction. Britain, it is true, returned to the pre-war Gold Standard in 1925, a year after the period I have here described as that of reconstruction. But the preparation was already made by her to achieve that end, by or before 1924. In fact, after they had settled, under the Baldwin-Mellon agreement, the question of Anglo-American debt in 1923; and after the Balfour declaration had been published regarding the policy of Britain in this matter of inter-allied war debts,—viz. that Britain would not exact from her Debtors anything more than would suffice to meet her own obligations to the United States, and to that end would offer every concession to her erstwhile Allies which would be compatible with her own financial position thus defined—the danger to the British Exchange was no more. Hence the return of Britain to the pre-war Gold Standard became merely a matter of internal economy. True, subseqent developments have proved that British statesmen and financiers were mistaken in their calculations regarding the effects upon the community of restoring the pre-war gold parity of Sterling. But that did not affect the situation as it appeared to the responsible British statesmen, and even economists, at the time this arrangement was made.

In France, Italy, Germany and other countries, the restoration of exchange parity was delayed much beyond the period we are now concerned with. The reasons for such postponement I have already indicated as consisting in France's peculiar expectations, and Germany's peculiar handicap, and the consequent recourse to borrowing and currency watering, that I need not repeat at this stage. The dominant position that France enjoyed as the patron, champion, or financier, of most newly created states on the Continent of Europe, in the years immediately following the War, made her a model and a guide for lesser countries, like Belgium and Poland, and the other newly created communities of central and eastern Europe. Hence, currency rehabilitation and exchange stability could not be attempted in this period by these countries.

In Italy, this problem was, for the greater part, mishandled because of the incompetence of the Parties that

came into power in that country at the end of the War. The excesses committed by the short-lived and tempestuous Socialist or semi-Socialist governments of that country were directly responsible for the rise of Fascism, that has evolved order out of chaos, and rehabilitated Italy's credit and the finances, and made Italian trade and industry take a leading place.*

Of the non-European countries, the United States, though a belligerent in the later stages of the War, was yet not so directly affected as the European countries had been. For the first 3 years of the War, American Industry and commerce experienced an unprecedented boom, that brought a slow, steady, natural rise in prices, and converted this pre-war borrowing country into a post-war lending one. For all the profits of war-time industry, which were

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* The following table from *the Course and Phases of the World Economic Depression*, 1931 Geneva, would make an interesting commentary on the text above. It relates to exchange fluctuations in 36 countries in terms of the U.S. Gold Dollar, and gives the difference between the highest and the lowest quotations.

FLUCTUATIONS OF THE DOLLAR EXCHANGE

Year	Not over 10 %	Not over 20 %
1921	1 country	6 countries
1922	8 countries	15 ,,
1923	11 ,,	15 ,,
1924	12 ,,	22 ,,
1925	21 ,,	26 ,,

The compiler of the review adds —

"After 1922, the Dollar Exchange was kept relatively stable in several countries, and two years later the Gold standard was introduced in Sweden, and the Gold Exchange standard in some other countries.

* * * * *

In Central Europe inflation had proceeded much more rapidly than elsewhere. In some of those countries the currencies had lost practically all their value. The whole of their economic life was dominated by this fact. Thus any reorganisation of their monetary system was extremely difficult. With the assistance of the League of Nations such a reorganisation was, however, carried out successfully in Austria as early as 1922. and in Hungary in 1924. The stabilisation of German Currency in 1923-24 was accompanied by the drawing up of a plan—the Dawes Plan—for a reparation settlement. An international loan of 800 million Marks, floated successfully in the Autumn of 1924 on the basis of the Plan, was an outstanding event in the post war financial progress.

reflected in America's steadily growing positive balance of International payments, were invested in buying up American bonds or other securities held by foreigners; and, when that was no longer available, in direct lending to European and other Governments and industry. Much of modern German, Italian, and even British industry is built out of American capital; and the American Government is the universal creditor in respect of the so-called War Debts. The bulk of this indebtedness had already been incurred when the War came to an end. But with the collapse of War demand, American prices fell sharply after a very short-lived post-war boom; and the first taste of depression was enjoyed in that country in 1921-23. As, however, I propose to devote a whole lecture to studying the American course of Prices throughout the Post-War period, I need say no more on that head in this Lecture.

In our own country, though technically belligerent, India was free from invasion. The war, therefore, gave a tremendous impetus to her industry and her trade. An importer of manufactured goods, her main source of supply of these goods, Britain, was cut off, because of the War ; and the heavy increase in the prices of her own raw-materials and food-stuffs, needed for the prosecution of the struggle, made the balance in her favour steadily higher every year of the War. The following statistics of Price movements in India, during and immediately after the War, would help to show how the Indian trade and industry were affected by the War, and how they fared in the post-war period.

Index Number of° Wholesale prices in India.°		Trade in Merchandise. " N.B." Figures are in lakhs Imports	Exports	Net balance° in favour of India	Treasure Imports
1914	100	191,31	249,01	57,70	36,36
1915	112	144,93	182,17	37,24	16,52
1916	128	138,17	199,48	61,31	3,71
1917	145	160,25	427,36	87,11	32,03
1918	178	164,35	244,90	80,55	44,22
1919	196	188,56	255,32	66,76	62,36
1920	201	221,70	332,76	111,06	64,56
1921	178	347,14	265,93	81,21	8,42
1922	176	270,40	248,65	21,85	10,01
1923	172	182,89	221,20	38,31	
1924	173	304,20	375,00	70,0	

§The Index Number of wholesale Prices is the Calcutta Index; while the figures for the Trade are those of Sea-borne trade for the fiscal year. It may be added, however, that while the Prices of Indian exports rose only by 57 p. c.; that of Indian Imports rose by 165 o/o.

It will be seen that, while the prices in India did not rise at their maximum to the level reached in Britain, the real burst of trade boom is to be found in the post-war years. The Indian Prices were prevented from rising to their natural height because of a number of restrictions to finance the trade, both local and foreign, so as to enable the steadily growing balance in fovour of India being easily settled. The balance in India's favour was further inflated because of the heavy payments the Government of India made on account of the British Government for their wars in Asia Minor, Egypt, and other minor theatres.* And when, in spite of Exchange and financial restrictions, the balance could nevertheless not be discharged, the Government of India raised the exchange value of the Rupee, which they had pledged themselves to maintain at 16*d* to the Rupee, ever since 1899. The raising of the Exchange Value of the Rupee, begun in 1916, culminated in the post- war policy of fixing the Rupee at 2/- gold, under the recommendations of the Babington-Smith Committee. They thought the value of Silver could never fall below the 2/- gold level of the rupee; but the event speedily disillusioned them—if they had any illusions. The export trade of India in post-war years collapsed directly because of this policy of unnaturally high Exchange; and the Imports grew particularly from Britain, which needed to dump off its war-surplus stock, or required a direct stimulus to her reconstructed normal industry. While the Pound was perhaps one-half its pre-war value, the Rupee was made to stand at 150% the pre-war level. The result was only partly seen in the direct loss to Government in their attempt to maintain this unnatural ratio by their frenzied sales of the Reverse Councils, and the consequent liquidation of sterling reserves at rockbottom prices † Throughout the period, therefore, we are here concerned with, Indian industry had to face every kind of handicap and obstacle. The policy of "Discriminating Protection," which was ennunciated and accepted by Government at the end of this period, produced results which fall outside our present review. In this period, therefore, 1919-24, whatever impetus Indian industry had received as the result of the war was dissipated, and new difficulties were placed in its way, with the result that Prices in India never rose to the level they rose in Britain or the European countries; and their collapse also came much sooner.

*See Foot-note ante p. 32.

†Cp, *Indian Currency Exchange and Banking,* by K. T. Shah.
It is estimated that Government lost at least 50 Crores in that attempt.

LECTURE V.

Period of Rationalisation, 1924-1929.

In the next Quinquennium, 1924-1929, I propose to review the advances made over the minimum needed to restore the war-worn countries to the level of their Pre-War national economy or prosperity.

This period is interesting to study the forces affecting the Price-level at work, because of some new forces or tendencies in operation. The conditions were, of course, not uniform in the leading countries; but the process of Reconstruction and Reorganisation following the war had revealed many possibilities of economies and improvements—both internal to a given industry, and common to the national industry and commerce—which would, if effected, advantage the countries making such economies in their competition with their rivals. This process of effecting all possible economies in the costs of production and marketing is collectively called Rationalisation. That is, why the period is collectively labelled in this Lecture as a *Period of Rationalisation*.

Before, however, going on to describe the essence of Rationalisation in business and in industry, let me repeat the warning already given: that, though for convenience sake, we outline the Price movements, and study the factors affecting them collectively all over the world, as if there were no local variations or differences in conditions, the actual facts reveal a wide disparity in the circumstances,—technical, financial and political--that determine the course of policy in many a leading country, and so react on their Price-level. France, for example, saw the lowest point of her currency exchange value in 1926. The stabilisation of both the *lira* and the *franc*, at a level substantially lower than before the War, comes well into the middle of this period. At the new level, however, it was presumed that the reigning costs and prices would be such as to balance; and so the new level fixed for these currencies may be taken as an index of the general belief that the normal system had been attained.

The same must be said of our own country, whose Rupee was linked to Gold, at about 12½% above the pre-war exchange value, only in 1927, when the Gold Bullion Standard was said to be

established by law. This process of completing the task of restoration to pre-war level,—or to more normal and settled conditions,—with due allowance for the irremediable dislocation caused by the actual war losses, naturally affected, by itself, the price level in the countries primarily concerned; and, by reaction from them, in the other countries of the world as well, which we shall endeavour to study in the pages that follow.

CHARACTERISTICS OF THE PERIOD, (1924-29.)

The main features, or characteristics, of the period may be summarised under the following heads :—

(1) Completion of the process of restoration to the pre-war level of the national economies in the countries most directly affected by the War, as exemplified in the stabilisation of the unstable currencies. Britain returned to the Gold Standard officially in 1925, incidentally modifying her old system so as to make it virtually a Gold Bullion Standard. Costs and prices were presumed to balance at the point at which British trade and industry had arrived in 1924; and so a return to this modified Gold Standard was not deemed inadvisable or uneconomic. If there was still any lag noticeable, it was presumed the normal working of international competition would make up the deficit.

French Currency was also stabilised in 1926, not on the pre-war Gold basis, but at 1/5th that value. By writing off, in this manner, her War losses,*—or writing down her national wealth to that figure,—France proclaimed to the world the hopelessness of recovering Reparations from Germany, on which she had, until the end of the preceding period, been building her Budgets. The Dawes Plan of Reparations Payments,—which came into effect at the commencement of this period, and which was made permanent by the Young Plan at the end of the period,—seemed to indicate, that, on a very much more modest scale, German industry and commerce might pay indemnity to France and Belgium for the latter's war damage,

*France is shown, in the Statesman's Year-book for 1921, to have spent on the War 191,241 million Francs including the service of the War Debts. This is equal, at prewar par of exchange, to £7650 million in round terms, or about 5 times the total annual income of the French people.

if general good-will was otherwise restored. France accepted the Dawes Plan, and thereby testified her desire to work for harmonious relations with her most important neighbour on the Continent.

Germany, too, was enabled, by the same tendency, to pursue the programme of her national economic development, which took in her case the most pronounced form of "Rationsalisation". We shall refer to this more at length hereafter.

The Soviet regime in Russia, and the Fascist rule in Italy, became more firmly established in those countries; and they also resumed the march of economic progress, which the political upheaval following the War had rudely interrupted.

The newer nations of Europe,—Poland, Yugoslavia, Czecho-Slovakia,—likewise elaborated more settled and determined policies of their national development. These often seemed to go counter to the main trend of peaceful and harmonious development; but they undoubtedly accounted for a substantial rise in the production from these countries. Turkey, Austria, Hungary, Greece, Spain, etc., told the same tale in varying measure.

With a highly developed industrial organisation within her own frontiers, the United States of America were rapidly launching out, in this period, as the financiers and builders of modern Industry in other countries, notably Germany, which borrowed heavily all through this period to reconstruct and modernise her industry with the help of American Capital. The liberal flow of capital from America to Europe, in this period, was at once the cause of the great progress achieved in it, and of the intense Depression that has followed in the next period.*

Japanese competition, similarly, began to gather pace in this period, and became a world phenomenon, the intensity of which we shall examine a little more fully hereafter. Its reaction on world Prices could not be questioned.*[2]

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* See Foot-notes on the next page,.

*The following compiled from "*The Course add Phases of the World Economic Depression* (Geneva 1931) gives the New Capital Issues on Foreign Account in the United States, and the United Kingdom. 1

($000,000's)

Issues in U.S.A.	Europe	Asia and Oceania.	Africa.	Canada and New—found-land.	America.	Issues not speci-fied	Total Foreign	Domestic Total.
1924	527	100	..	151	191	..	969	4596
1925	629	147	..	137	163	..	1,076	5134
1926	484	38	..	226	377	..	1,125	5199
1927	577	164	..	237	359	..	1,337	6230
1928	598	137	..	185	331	..	1,251	6796
1929	142	58	..	295	176	..	671	9425
United Kingdom								
1924	159	314	66	20	31	3	593	
1925	53	216	72	10	68	5	424	
1926	120	226	32	29	129	10	546	
1927	105	238	136	34	126	35	674	
1928	164	232	80	98	96	28	698	
1929	105	139	51	74	78	12	459	
1930	53	195	129	17	101	34	529	

1. Issues for refunding purposes are exluded. The American figures refer to nominal value, the British to prices of issue.
2. International issues.

†The growth of Japanese Exports (Table I, *Foreign Affairs*, October 10, 1934) is shown below,—(in thousands of yen)

1913	632,460	1925	2,305,590	1931	1,146,981
1919	2,098,873	1926	2,044,728	1932	1,409,992
1920	1,948,395	1927	1,992,317	1933	1,861,046
1921	1,252,838	1928	1,971,955		
1922	1,637,452	1929	2,148,619		
1923	1,447,751	1930	1,469,852		
1924	1,807,035				

Falling in 1931 to less than 50% of 1925, the exports have recovered to about 80% of that figure.

In our own country, finally, the policy of "Discriminating Protection" to local industry, first accepted in 1923, was slowly extended to old as well as new industries facing the ever growing world competition. The resources of the country were thus more intensively exploited, so as to add materially to the production volume of the country. Her currency was linked officially to gold, as already remarked, in 1927, at a ratio in exchange 12½% higher than before the War; the Budget was balanced, and productive equipment generally attempted to be improved. All these reacted materially on the Price-level.

(2) Next in importance to, but closely linked with, these economic developments of this period, which tended in the same direction, came: increased production, better trade, and rising prices.* The force

Statistics of Foreign Trade
(Merchandise and Treasure) in millions.

		1925	1926	1927	1928	1929
Canada (1)	..	941	1055	1118	1251	1303
$ (2)	..	1080	1285	1288	1482	1256
U.S.A. (1)	..	4369	4691	4426	4315	4694
$ (2)	..	5180	4920	5036	5678	5357
China (1)	..	1024	1205	1098	1315	1388
(Tael) (2)	..	791	899	939	997	1034
Japan (1)	..	2487	2307	2107	2136	1517
(Yen) (2)	..	2242	2008	1961	2104	1742
India (1)	..	3074	2806	2829	2883	2797
(Rupee) (2)	..	3992	3250	3217	3366	3268
Europe						
France (1)	..	44709	59842	53073	60200	66925
(Fr.) (2)	..	46734	59447	55860	52535	50337
Germany (1)	..	13080	10617	14466	14968	13998
(RM). (2)	..	8388	9819	10245	11645	13637
Italy (1)	..	26281	25950	20530	22380	21907
(Lira) (2)	..	18275	18275	15638	15006	15246
U.K. (1)	..	1219	1166	1135	1173	1182
(£.) (2)	..	835	835	691	793	816
U.S.S.R. (1)	..	723	756	714	946	836
(Rbl.) (2)	..	594	703	807	788	890

(1) Represents Imports
(2) " Exports.

of Economic Nationalism did not indeed, decline in the slightest degree ; but the conclusion of the Locarno Pact, the admission of Germany to the League of Nations Council, the recognition of the Soviet Government, —these may be taken as illustrations to prove that the main political tendency of the age was to weaken the force of traditional enmities, and pave the way to a better understanding and greater co-operation than had been the case in the preceding period. It is unnecessary to pronounce, in this place, how far these developments marked a genuine change of heart, and how far they represented only surface alterations that did not affect the main currents of European political life. While they lasted these tendencies worked for a greater and better world economy ; and so the period was marked by rising industry and growing production, which might, at first, be held to portray a better and juster distribution of the wealth produced. That it was actually not so is due to other circumstances and conditions, which we need not dwell upon in this place,

(3) The progress of Dictatorships in several European countries—Italy, Turkey, Spain, Russia, Poland, not to mention Hungary or Yugoslavia—did not neutralise these tendencies to any material degree. On the contrary, there is reason to hold that the greater stability which these Dictatorships implied, and the better and more scientific organisation of the national economy which they involved as a necessary corollary, made the advantage in the aggregate all the more evident. Their disadvantage lay, probably, on the side of distribution, in the lack of attention to the simultaneous improvement in the purchasing power of the consumer, which has, in the period next following, become the nemesis of such regimes, that has perhaps yet not borne its full fruit.

(4) Tariffs and commercial treaties affected the international price level in this period perhaps more considerably than in the past.* Natural economic forces often dictated international alignments concretised in treaties, which sought to distribute the world's trade on a more advantageous basis for the treaty-bound countries.

*See for a summary of these Tariffs etc, the Lecture on Economic Nationalism.

(5) The break up of old landed estates in some of the newer European countries among peasant proprietors,—who, being backward, and cultivating on a small scale, were unable to realise all the advantages of large-scale production, and so unable to compete effectively even in their own markets,—demanded ever stiffening, widening, deepening protective tariffs for these countries. The tariffs, in their turn, raised the prices of agricultural commodities, and, through those, of the total value of the world's wealth exchanged. They also helped to strengthen the tendency to industrial combinations,—trusts, cartels, mergers, syndicates, monopolies,—which all ended in raising or keeping up the price-level.*

We shall glance at the extent to which these forces operated in the pages that follow.

*The movements of Prices in this period may next be reviewed to facilitate the broad general explanations that follow :—

	Wholesale Prices (1913=100)						Retail Prices				
Country	1924	1925	1926	1927	1928	1929	1925	1926	1927	1928	1929
America°											
U.S.A.	141	148	143	137	139	137	176	175	173	171	171
Canada	155	160	156	153	151	149	152	153	151	151	153
Europe											
France	..	..	141	130	131	127	400	505	514	519	556
Germany	137	142	134	138	140	137	140	141	148	152	154
U.K.	166	159	148	142	140	137	176	172	168	166	166
Italy	512	596	603	495	462	446	611	654	588	530	545
Asia											
Japan	206	202	179	170	171	166	218	199	189	184	181
India	173	159	148	148	145	141	155	155	154	147	149
China	98	99	100	104	102	105	..	..	100	107	103
Oceania											
Australia	173	170	168	167	165	166	144	146	145	146	149
New Zealand	162	161	154	146	147	147	100	101	100	101	100

*These figures have been compiled from the Statistical Year Book of the League of Nations for 1933-34. In almost every case official indices have been taken. In the case of France, the wholesale Prices are in terms of the Gold Currency, and the Cost of Living Index, or Retail Prices, is in terms of Paper money. Chinese index commences from 1926, while the New Zealand Cost of Living, or Retail Price Index, is based on 1926-27=100 In Italy the revalued paper money index is taken in both the wholesale and Retail Prices.

Allowing, however, for the varying circumstances of the different countries, the period may fairly be described as one of *Rationalisation of Industry and Commerce.* The pro cess had become inevitable, not only because the closer links between Industry and Science, forged by war-time needs, rendered a scientific management of Industry unavoidable ; but also because the increasing competition in the World markets from the new nations created by the Peace Treaties, and the industrial development of the relatively backward nations of the per-war days, rendered the search for every possible economy by avoidance of waste, utilising, waste products in subsidiary industry, standardisation of parts, and large-scale mass production, with the most up-to-date specialised machinery, so as to maintain the hold of the national producer on the domestic as well as the international market.

This double set of forces,—on the one hand technical improvements in the mechanical equipment and scientific management of industry, commerce, with careful adjustment and co-ordination of all their their accessories ; and, on the other, scientific, nation-wide, planning for suitable industries, with intensive and varied fiscal assistance by the Governments concerned,—led to reaction on Prices, that has, for the moment, culminated in an unprecedented Depression all over the world. The nature, causes, and consequences of that Depression, we shall study in another Lecture. Here it ought to suffice to add, that the progress of each country, reviewed briefly in the following pages, seems, though not uniform, and not always measurable by the same index, to proceed nevertheless on similar lines during this period.

GROWTH OF PRODUCTION.

The immediate dislocation of industry and trade, directly caused by the War, being over, the leading countries of Europe and America were settling down to new developments for normal, peace-time economy. * A considerable change in aggregate production occurs in consequence, raising the volume of total world production very substantantially, without anything like a corresponding

*Comparison is made with 1927. not because the maximum had been reached in 1927, but because it makes a continued contrast with pre-war levels. With a new basis in 1925, the table of total Production would read as follows :— (Continued on next page.)

increase in popularion. The loss of life caused by the war had not yet been made up in Europe, at least as far as the adult working population was concerned. The following table of percentage increase in Population and Production will serve to explain this change :

I POPULATION.		II Production Indices (1913=100) General Index (1927) Foodstuffs 1923	Raw Materials 1927
World (1927)	109	106	124
Europe	106·5	85	112
North America	123·1	127	129
South ,,	140·9	130	140
Asia	106·7	110	132
Africa	111	125	149
Oceania	123	107	123

These figures would not fully show the extent of real recovery made in European belligerent countries, unless one considers the 1923 statistics for comparison * Between 1925 and 1929 the population of the world seems to have grown annually by 1%, though the increase was smallest in Europe, where the tendency to an artificial limitation of families has been steadily growing. The population problem of Europe is intensified by : (*a*) the ravages of the war, and the consequent lack of adult manhood, the surplus of unmarried or unmarriageable women in reproductive age-periods, and the excess of juvenile population ; (*b*) by the anti-immigration laws of America, which had before the War served to absorb a goodly proportion of European surplus population ; (*c*) by the devices of militarist governments

	Food Stuffs.				Raw Materials			
	1926	1927	1928	1929	1926	1927	1928	1929
Europe	99	101	106	110	96	118	119	131
North America	99	102	108	97	108	100	106	114
Latin ,,	104	110	109	103	101	104	118	122
Africa	100	108	107	114	99	96	108	115
Asia	100	101	102	102	102	109	114	116
Oceania	112	105	117	108	107	107	113	108
World	100	102	106	105	103	108	112	120

*For a detailed view of the growth in Production in the principal countries of the world, Cp. the appendix to this chapter pp. 130-33 inclusive.

in Europe encouraging a high birth-rate to maintain a given proportion of military man-power; and by (*d*) the advances of science, which have either abolished or brought under effective control some of the ancient scourges of mankind, like plague, cholera, or small-pox, and so reduced the Death-rate.

In the same period, the production of food-stuffs also increased, but at a much slower rate than the production of raw-materials for industry. This indicates a somewhat disproportionate development or disharmonious economy, which eventually brought its own calamity in a world-wide depression. Part of the increase in industrial raw-materials may be explained by shifts in demand, which reduced the consumption of food-stuffs but added to the other wants of civilised humanity. On the other hand, manufacturing Industry progressed much more rapidly, as is evident from the following figures.

INDICES OF INDUSTRIAL PRODUCTION (1925-100)

	1926	1927	1928	1929	1930
America					
Canada	117	125	138	154	131
U.S.A.	104	102	107	114	93
Europe					
France	116	102	119	130	131
Germany	95	120	120	122	101
Poland	98	123	138	138	113
Sweden	110	113	120	135	..
U.K.	77	111	105	113	101
U.S.S.R.	139	164	198	223	..

@ Compiled from the League of Nations, Economic Intelligence Service, *Memorandum on Production and Trade* 1925 to 1929-30, p. 46. Swedish Index is official, and the U. K., from the London & Cambridge Economic Service.

This growth in manufacturing Industry was due, partly to the evolution of new industries,-like Artificial silk, Radio appliances, air transport vehicles,-or a revolution in older industries, such as shoe-making and saddlery, mechanical and electrical engineering and generation of electric power, rubber manufactures, ship-building, Automobile industry, paper and printing, etc., etc., It was partly due also to that process of Rationalisation, which applied as much to the internal equipment and technique of production ; conduct and management of each individual business enterprise ; combination of several enterprises in a given industry, so as more effectively and economically to distribute work, secure raw materials, control out put, regulate markets and fix prices. The League of Nations Memorandum, already referred to, summarises this feature of the period, in the following terms :—

> "The Artificial Silk industry, mechanical and electrical engineering, and generation of electrical power, all appear to have raised their output by over one-half, the rubber manufacturing industry by over 40% (outside the United States, by over 90 per cent.) the Iron and Steel, ship-building and motor vehicles industry by about 30%, the paper and printing industry by about 25 per cent., and the timber industry by somewhat less ; while the developments of the leather, boot and shoe industry, and still more that of the textile industry as a whole, have been comparatively slow, not exceeding 15 and 10 per cent respectively."*

Because of this increase in production, the period also witnessed a considerable growth in International trade, which, therefore, made local Prices conform more and more to the international level. Given fixed and stable Exchanges,- a characteristic of this period,—and rapid industrial development in a number of countries, Capital movements were even more profitable than ordinary commerce, so that the development of international commerce during this period was made doubly remarkable, despite the growing vogue of Economic Nationalism, and the consequent rise in Tariffs, exchange restrictions, import and export quotas per cent.*1

* For more detailed particulars of the expansion of these industries, cp. the Memorandum on Production and Trade, League of Nations Economic Intelligence Service pp. 45-94. Also Prof. Mitchells Report on Recent Economic Changes in America, Vol. I. And the appendix to this chapter pp. 130—133

The trade boom continued unabated upto 1928, and its impetus was not altogether lost in the year when the first manifestation of the approaching Depression occurred, 1929. The bulk of this trade was increasingly in manufactured articles, food-stuffs and industrial raw materials suffering a steady decline. As the prices of manufactured articles had risen even more than those of food-stuffs and raw materials, the decline in quantum was not perceived at the earliest moment of its occurrence. As between the several Continental groups, Europe made the most rapid general progress during this period, though the index of foreign trade was higher in the case of Africa. Due chiefly to the intensive development in Soviet Russia, where the First Five Years Plan came into operation in 1928,—the reduction, in the quantum of food-stuffs and raw-materials production, which is noticeable in the first year of the next period, was unnoticed because of the growth of corresponding production in Russia. In North America, both Canada and the United States combined, new records were made for production and trade in 1928, though the rate of growth was slower than in Europe.

The year 1929 marks the decrease in the total production, due almost wholly to bad harvests of that year. As a matter of Index Numbers, however, North America shows in 1929 an increase in the production of raw-materials and foreign trade, while the manufacturing activity of that continent establishes a record. In Asia, too, steady progress is observed, though at a much slower rate, both in aggregate production and foreign trade, though industrial raw materials grew at a much more rapid pace.

But while other forces and tendencies may explain, in varying degrees in different countries, the economic advance noticeable in almost every case in this period, the most prominent single force working to this end in all the leading countries was a scientific reorganisation of each nation's industry, which has come to be described generally as Rationalisation. Let us now review in brief that phenomenon.

Causes, Extent and Consequences of Rationalisation.

I have referred more than once in the course of these Lectures to the factor of Rationalisation in business and industry, which has materially affected the course of prices in the world during this period. Technological improvements in the conduct and equipment of industry, and the methods of the disposal of its produce, are, of course, no new phenomena. But the great volume attained by wholesale changes

of this nature, in the years following the war, and in the efforts made to remedy the dislocation caused by the protracted and wide-spread struggle, has deservedly given to this phenomenon in our times a special name, **Rationalisation**, and attributed to it considerable influence in causing and remedying economic booms and depressions.

The original impetus, the guiding force, first came from the war-time necessity of belligerent countries, which, like Germany, suffered heavily from a chronic and acute shortage of the raw materials needed to carry on the war. Whether it was a case of inventing substitutes for such of the materials as could not be obtained from the original pre-war sources, thanks to the prevalence of hostilities and the consequent impediments in the shape of submarine danger or the blockade, or a shortage of the stocks of materials, the country was obliged to make the utmost use of the available quantity, and make it go the longest way possible under improved technique of handling such goods, or with better machinery. The growth of Labour consciousness after the War, the strength of the Labour Vote in democratic countries like Germany, France, Britain or the United States, and the consequent legislation limiting the hours of work, and increasing the rate of wages, along with making welfare provision for workers by way of insurance whether employed or not,—all added to the burdens upon the industry, which could not survive without improved methods of managing the business, and better equipment for turning out the produce. The same trend was necessitated by the increase in international competition following the war, so that the older countries could no longer rely upon their wonted markets if they did not effect the mechanical and managerial improvements carried out by their competitors. The aid of science was requisitioned more intensively than ever, (*i*) in avoiding waste in industry; (*ii*) economising labour by (*x*) careful motion studies, internal transport of work to workers, (*y*) attention to the workers incentives, for work by careful selection with an eye for their aptitude for the work, increased remuneration as a special incentive to greater output (*z*)and better hygiene;(*iii*)utilising waste in by-products, which provided new employment and made new wealth, as it were, for the community; (*iv*) standardising parts and simplifying processes ; and in every other manner co-ordinating demand with supply, so as to keep up prices.* The tendency

*For some illuminating details of the economies possible in these various ways, see Lecture VII, Prices in the U. S. A.

to avoid competition, and the waste resulting from it, even under capitalistic organisation of society, had made its appearance long before the war in the leading industrial countries of the world, in the shape of Trusts, Cartels, Syndicates or Combines.—all formed with the ultimate object of establishing a virtual monopoly of production and so maintain prices, which might otherwise not be possible. *

The control of Government, imposed for the same general reasons, on the stable industries of a country, acts in the same direction. So also the need for trying out new experiments in highly complex processes or delicate machinery, which involve considerable capital outlay. Necessarily there must be combination under all these circumstances, and consequently monopoly, large-scale mass production, steadier prices, utilisation of waste, etc., Even protective tariffs act in the same direction.

* Germany is the land wherein such cartellisation of industry has been carried to the highest point. Ir many cases the national legislation makes such cartellisation compulsory. Estimates made at various dates by different authorities may not be exactly comparable but the trend of increase is very definite. The following estimate may be collated showing the number of cartels in Germany at different dates. The effect of previous periods in which tariff protection was greatly increased is clearly demonstrated *e.g.* after 1897 and 1908. This is a *prima facie* reason for expecting increased cartellisation again to follow the strengthening of protectionist policies. The post-war inflating period, which gave exchange protection, also facilitated the organisation of cartels:—

Date and author of	Estimated Number of cartels	Date and Author of	Estimated Number of cartel
1865 (Sombart.)	4	1900 (Zeutralver banb der (Deutschen Industrie)	300
1875 "	8	1905 (Amt 1. Enquete)	385
1887 (Philippovich)	70	1911 (Tschiersky)	550-600
1888 "	75	1922 (Liefman)	1000
1889 "	106	1625 (Metzner)	1500
1895 (Bucher)	143	1930 (Wagenfuhr)	2100
1896 (Sombart)	250		

(cp. world Economic Survey, 1933-34 p. 71)

That prices are maintained at more stable level in cartellised than in non-cartellised industry will be evident from the following figures, from the World Economic Survey 1932-33 pp. 62.

Cartellised & Non-cartellised Prices in Germany,

	Carteillised	Non—Cartellised.
1929	104·6	101·9
1930	105·0	90·4
1931	95·2	66·2
1932	84·3	51·2
1933	83·5	45·7

The subjoined table shows the strength of the cartellised Industry in Germany.

APPENDIX III.

Amount of Share Capital of German Companies comprised in the Concerns dealt with (Report of the Reich's Statistical Office, 1927).

Industrial group	Joint Stock Companies in Germany on 31st October 1926.		Companies comprised in the concerns at the end of 1926.		Share capital of the companies included in the concerns in proportion to the total share capital of the industrial group (per cent).
	Number	Nominal Capital (in millions of Rm)	Number	Nominal capital (millions of Rm)	
I and II. Agriculture and forestry, fishery	84	77	11	27	35·1
III. Mining	178	1,273	84	1,183	92.9
Coal	25	467	15	421	90.1
Lignite	65	379	39	358	94.1
Potash mining	21	299	20	294	98.3
III. (a) Undertakings connected with mining	84	2,798	54	2,739	97.9
IV. Stone and earth industry ..	633	623	84	386	45.9
V. Iron and metal extraction ..	168	446	61	356	79.8
Heavy iron industry	19	300	39	255	85.0

APPENDIX IIIa

Amount of Share Capital of German Companies comprised in the Concerns dealt with (Report of the Reich's Statistical Office, 1927).

Industrial group.	Joint Stock Companies in Germany on 31st October 1926.		Companies comprised in the concerns at the end of 1926.		Share capital of the companies included in the concerns in proportion to the total share capital of the industrial group (per cent).
	Number.	Nominal capital (in millions of Rm)	Number.	Nominal capital (millions of Rm)	
Va. Works connected with iron and metal extraction	57	293	16	244	83.3
VI. Manufacture of iron steel & metal goods	420	322	42	84	26.1
VII. Engineering and shipbuilding	1,018	1,695	154	737	43.5
Engineering	808	1,245	128	588	47.2
VIII. (1) Electro-technical industry ..	259	671	63	583	86.9
(2) Instruments and optical industry	104	113	15	45	39.8
IX. Chemical industry Dye industry ..	620	1,853	118	1,533	82.7
Dye industry	81	1,147	9	1,105	96.3

X.	Textile industry	839	1,081	109	403	37.3
XI.	Paper industry & reproducing industry Paper and cellulose ..	426	365	31	91	24.9
	Paper and cellulose ..	211	249	24	77	30.9
XII.	Leather and linoleum industry ..	141	168	7	57	33.9
XIII.	Rubber & asbestes industry ..	50	116	6	56	48.3
XIV.	Wood industry	430	184	14	11	6.0
XV.	Musical instruments and toys ..	77	44	3	10	22.7
XVI.	Food and drink industry ..	1,312	1,365	217	554	40.6
XVII.	Clothing industry	314	170	14	18	10.6
XVIII.	Building industry	206	179	22	255	30.7
XIX.	Production and provision of water, gas, and electricity ..	280	1,692	169	1,381	81.6
	Production and provision of electricity	206	1,349	135	1,117	82.8
XX.	Commerce	3,488	2,549	316	1,504	59.0
	Banks	720	1,659	142	1,224	73.8
	Mortgage Banks	39	188	21	128	68.1
	Financing companies ..	151	198	24	153	77.3
	Dealing in land	1,105	295	52	58	19.7
XXI.	Insurance	345	566	155	435	76.9

APPENDIX III.

Amount of Share Capital of German Companies comprised in the Concerns dealt with (Report of the Reich's Statistical Office 1927).

Industrial group.	Joint Stock Companies in Germany on 31st October 1926.		Companies comprised in the concerns at the end of 1926,		Share capital of the companies included in the concerns in proportion to the total share capital of the industrial group. (per cent).
	Number	Nominal Capital (in millions Rm)	Number	Nominal Capital (millions of Rm)	
XXII. Transport	483	1,478	168	753	50.9
Sea and coast shipping ..	75	288	21	233	80.9
Inland navigation ..	61	79	19	48	60.8
Railways	266	989	102	284	38.8
XXIII. Hotel industry	168	106	11	37	34.9
XXIV. Theatre and sport industry ..	140	90	21	58	64.4
XXV and XXVI. companies.	108	37	2	2	5.4
Total. ..	12,392	20,354	1,967	13,242	65.1

Raw material industries	1,120	5,433	299	4,808	88.5
Manufacturing industries ..	6,290	9.839	962	5,563	56.5
Trade, commerce, and transport ..	4,584	4,789	671	2,787	58.2

1 Only companies whose capital is mentioned in marks, and, for the Saar Territory, in French francs. Compiled from the 'National and International Monopolies, from the point of view of Labour, the consuming Public, and Rationalisation" by Prof. Julius Hirsch (League of Nations—I. L. O.—Geneva 1926)

A different set of forces accounting for the same general development--" Rationalisation in Industry "—is concerned with Finance and currency disturbances. During periods of rapid inflation, as in Germany upto 1924, there is inevitably a " flight from money ". In this, when people cannot convert their local wealth into foreign currencies, they do so into more permanent and earning assets, which directly encourages the extension and expansion of Industry. Conversely, when deflation is in operation, when systematic restriction of currency, credit, and, therefore, of the financial resources of industry, is the order of the day, industrialists devise means to make the most of their available resources,—a phenomenon, which also occurred on a large scale in Germany.

The forms taken by the process of Rationalisation are manifold. They differ according to the special circumstances and traditions of each country, and of each industry. We may, however, distinguish between the following three forms, *i.e. before* the process of working-up raw material commences, *during* that process, and *after* that process is completed.

(*a*) The first category seeks an adequate, cheap, guaranteed supply of materials needed for turning out the produce, which may involve agreements with competing firms, or treaties between competing countries.* It is this factor which leads to a vertical combination in industry, under which one and the same organisation controls the supply of raw materials, all accessories and subsidiaries, and by-products, as also the final articles. It is most vividly illustrated in the case of the syndicates of Iron and Steel industry, controlling from coal mines to Railroads and machine tools industry, and functioning, in its latest phase of development, on an international basis.

(*b*) Mechanisation of Industry, with the most specialised and economical machinery, reducing the human element to the minimum, combined with a careful

*The Paris Economic Conference of 1915 between the western European allies,—Britain and France,—was the earliest instance of this development It aimed at sharing of the world's supply of raw materials between the Allies,—so as more cheaply and effectively to obtain an assured quantity and required quality of these materials.

planning of the entire work-shop, so as to involve the least wastage of energy in the movement of the material, and the operation by the worker from machine to machine, until the finished product is ready for delivery. A whole series of improvements are necessary in this category, and a whole science of Business Management has been built up in the last 25 years on this basis. These are best illustrated by such a modern, specialised, highly mechanised and rationalised plant, as that of the Ford Automobiles at Dearborn, Detroit, U. S. A. I cannot stop to explain to you in this Lecture the various devices employed for this purpose, nor dwell upon the various economies resulting from them. Those of you who are interested in such developments of our time might do well to refer to such works as "*My Life and Work*" by Henry Ford, or "*Social Aspects of Rationalisation*" in the International Labour Office Series of Studies and Reports.

The tendency, I may add, is not confined only to manufacturing industry, like textiles, matches, leather goods, iron and steel, other metalware, and minerals. It has been extended to Agriculture, where the power-driven machine is repidly ousting human labour or animal energy. This is illustrated in the most arresting manner in the successive Five Year Plans of Russia, where, however, the displacement of human labour by the machine has not caused Unemployment, as the rapid mechanisation of Industry has caused in European countries and America.

Mechanisation must inevitably mean large scale production, if all the economies of machine production are to be reaped. Modern factories, modern farms, ships, lorries are constantly growing in size, their scale of operations, and the volume of goods produced or service performed by them. One result of this process is a constant increase in supply, side by side with a falling demand, because of the reduced purchasing power of the unemployed, as also because of the increased amounts taken up by way of taxation to maintain the unemployed section of the community. Unless some contrary forces are set into motion, *e.g.* by state regulation of prices, controlled supply, combination amongst producers to monopolise the market —prices must fall as a result of this development.

Side by side with Mechanisation, come in all those economies in internal managment, which we associate with the modern phenomenon called Scientific Business Management. I cannot stop in this Lecture to particularise all such possible economies, even if I were in a position to epitomise them as relating to the leading industries. Suffice it to add that the net effect of such savings and economies must generically be of the same character as that mentioned above—decline in prices—unless contrary forces are simultaneously put into operation.

(*c*) When the finished product is ready, the sales organisation steps in to organise and control markets, and minimise the intervention of the middlemen, and so eliminate their innumerable commissions, with a view to secure the largest slice of profit for the producer by direct contact between him and the ultimate consumer. For this purpose they have devised, in America particularly,- the system of instalment Sales, and Chain Stores, to distribute the products of a given industry or combine. Intimate relations with Banks, which are an offshoot of this development, also help to economise in the matter of capital and overhead charges. Combination among competing establishments in the same industry becomes ineveitable; and a rigid control of supply with a view to maintain prices at a profitable level indispensabe.

It is also at this stage that Governmental help, by way of direct fiscal protection, or a definite financial bounty on production, or subsidy, becomes necessary. Indirect administrative encouragement of native industry follows in the wake of this tendency. Combinations among pro ducers to maintain prices by agreement among them at a predetermined level has already been noted above. The influence of international agreements between cartels of several countries, each dominating, a given industry, whereby markets are zoned out between the producers in the several countries in the given industry, acts most unexpectedly so as to neutralise the force of tariffs for the preservation of domestic markets to the local producer. Again, I plead inability to explain at fuller length the ramifica tions and consequences of the host of devices and contrivances, whereby competitive industry seeks to undo the mischief of competition, whereby Economic Nationalism ends in capitalist internationalism, defeating it not discarding the means by which such nationalism had expressed itself

in the past, which would reduce the level of profits; or where in the purpose of Planned Economy on a national scale makes, itself most obvious, in countries like Italy, Russia, Germany or, under the latest developments, the United States.

The foregoing remarks have been made as if the peculiarly suitable field for Rationalisation was to be found in large scale manufacturing industry. Rationalisation, however, in the widest sense of the term, is as applicable to Agriculture as to manufacturing industry. Both Russia and the United States provide living and vivid examples of this theme. Says the International Labour Office Study in the "*Social Aspect of Rationalisation*" :—

> "For some years now, one of the guiding principles of economic development has been Rationalisation. There is rationalisation of factories, of whole branches of industry, of banks; attempts are made to introduce it in the distribution of goods, in agriculture, in private and public administration, in the economy of whole countries, and even of the whole world. At the same time, methods of bringing it into the narrow sphere and elementary relations of domestic economy are being sought."

The extent of Rationalisation varies in the different countries, but the process is common in all over the world. The most outstanding examples of the Process are Germany, United States, Great Britain, Russia, and of late, Japan. As we study in greater detail two of these five countries in special Lectures dovoted to each of them; and as many details about Germany have been inserted in this, there is no need to discuss the many forms and shades of this process in each of these countries. The lesson is the same everywhere.

Let us, next, briefly review the Consequences of this process of Rationalisation. They may most conveniently be studied under the following main heads :—

(*a*) Increase of output;

(*b*) Growth of unemployment;

(*c*) Stabilisation of prices.

The rise of Trusts and Cartels; the growth of vertical as well as horizontal combinations among the industrial concerns ; the introuduction of price-control and labour regulative machinery by legislation, or collective bargaining by trade unions and employers' associations ; the intervention of the State for wholesale, all round, planning of the collective national economy,—these are all consequences which may not be unjustly considered to be secondary They are often unintended by, and sometimes unwelcome to, those who took the initiative in the process of rationalisation. As such they may be regarded—not, indeed, as immaterial, but rather as secondary results, which raise problems different from those we are primarily concerned within this series of Lectures.

It would fill volumes were I to give examples of the increase in output resulting from Rationalised production.

Whether the process of rationalisation takes the form of careful selection, and training of workers; proper planning of the workshop and distribution of work; careful attention to the workers' health, comfort, and general hygiene, as well as proper stimulation, by adequatei ncentive of their energy, suitable internal transport of work, better machinery, standardisation and simplification of parts and processes; mass production by better machinery, improved sales organisation, the net result intended and achieved is the increased volume of production. Hundreds of examples, literally, are given in the specific study on Rationalisation already mentioned; and those of you interested in the subject would do well to look up the original sources given there. In the next Lecture, moreover, I shall outline in greater detail the results of Rationalisation as they show themselves in the United States,--the most considerable case, after Germany, of the progress of Rationalisation. In the present Lecture it is enough to refer to some statistics of the growth of industrial production in particular branches of industries, in certain selected countries of Europe,—leaving out Russia, which is another large scale example of this tendency, and to which I propose to devote another entire Lecture;* given in the Appendix, pp. 130-133.

(*b*) The growth of Unemployment, which inevitably follows a systematic execution of rationalising processes,—

@ For American Statistics on these subjects, see the Lecture devoted to the United States of America in this Series.

unless the entire national economy is planned and carried out, as in Soviet Russia, may occur in a variety of ways. In industries, like for instance, ships-where coal burning has been replaced by oil burning, where the Internal Combustion Engine is also making a heavy progress, or in a telephone-exchange substituted by automatic dialling; or in better devised tools and implements, which, like the classic shovel of Taylor---the father of Scientific Management--the number of men required for the same process or the same amount of work is substantially reduced. For the same output less men would be required; and even for increased output proportionately less workers needed. In the highly nationalised American Industry, between 1899-1927, while the number of persons in industrial employment increased by 86.4%, the volume of productions increased by 178.7 %, and the output per worker increased by 49.5%. *

In the single case of coal-mining,—where Rationalisation has taken many forms;--and in the case of Germany particularly, which was made to sacrifice heavily territory yielding coal in large quantities as the result of the war,—Rationalisation has succeeded in making up the deficit in the aggregate coal resources by increasing the output from the mines still available, as also the output per worker. Says the special study on the *Social Aspects of Rationalisation*:-

> "The number of workers employed in the Coal-Mines of Germany fell from 694,236 in 1922 to 558,938 in 1924 and 517,401 in 1929, a decrease of 176,835, or 25.5% as compared with 1922. The application of various rationalisation measures enabled Germany to make up to some extent for the lossess resulting from the ceding of territory. The output in the present territory of Germany was 140,753,000 tons in 1919, 118,769,000 tons in 1924, and 163,440,632 tons in 1929",*

The same tale of Technological Unemployment of this nature is repeated in most other countries. Even where the first result of Rationalisation is to create new industries, or to increase demand by reduced prices resulting from more economical working, the capitalistic society is unable to absorb the normal growth of population, because of

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* Op. Cit. p. 87.

*For American Statistics on these subjects, see the Lecture devoted to the United States of America in this Series.

the constant economies in the aggregate Labour force needed for the same—or even increased—scale of production. Except in a properly planned national economy,—as in Russia, or, to some extent, in Italy —where all changes in the aggregate industrial organisation of the community are thought out in advance, and all reconstructive rationalisation applied simultaneously and sympathetically, so as to allow the least dislocation of the collective economic system of the country, the economies considered and carried out for each industry separately, as though no other industry existed,—or no other demands upon the industry counted, except those of profits for the capitalist owners,—must inevitable result in such social disadvantages as the creation of a vast mass of unemployment, steadily rising because of the anarchic operation of the individualist motive for private profit. The lower prices that sometimes result because of the need to market a larger output for the rationalised, concentrated, monopolistic producer, do not add to the purchasing power of the community, inasmuch as the saving made in this manner is rarely transformed into productive capital and employed as such. The reduction of employment, even when the volume of wages does not fall, must react upon the aggregate purchasing power of the community, which would accelerate the decline in prices. This particular phenomenon we shall examine a little more in detail in the Lecture devoted to the present Depression, and so here it is enough to add a few figures relative to unemployment which will help to make clear the argument of this section.

	Germany	France	Belgium	Italy.	U.K.	Canada	U.S.A.	Japan
1925	646,000	712	33,278	119,486	1,506,565	17206	..	..
1926	2,011,000	1,854	24,697	125,839	116,270	12881	..	..
1927	1,353,000	33,549	34,875	375,534	1,290,229	13541	..	..
1928	1,353,000	4,834	28,129	362,879	1,262,491	12758	13%	..
1929	1,678,824	928	27,293	346,941	1,993,951	14966	12%	..
1930	3,139,455	2,514	74,168	448,845	3,716,853	33008	21%	366799
1931	4,573,218	56,112	201,076	763,176	2,846,395	71385	26%	413248
1932	5,579,858	273,412	336,727	1,039,910	2,566,768	75140	32%	489168
1933	4,733,014	275,395	337,212	1,018,955	2,097,251	81809	31%	413853
1934	2,528,900	323,427	345,341	941,257	..	88452	25%	381235

Wages Index Numbers 1914=100

	Canada		U.S.A.		Japan	Germany General Index	France	U.K. Agriculture, mines Industry Public service	Agri-culture.
	Industry	Agriculture	Industry	Agriculture					
1927	188	195	102	100	101	94	593	101	113
1928	187	196	104	99	103	101	617	100	113
1929	188	194	106	99	103	106	680	100	113
1930	188	173	95	88	97	107	730	99	113
1930	183	136	81	67	92	101	729	98	112
1931	174	106	63	49	93	86	706	96	110

@ These Statistiss are compiled from the Statistical Year-Book of the League of Nation, 1932-34. They relate to a total of the Unemployed, whether partial or wholly. In the case of the U. S. A. they give only percentages, and that, too, the unweighted Index of those totally unemployed. The Statistics are collected or compiled in a different manner.

As already pointed out, this growing unemployment helps to depress prices in two main directions. The unemployed worker loses the normal purchasing power that his employed confrere has; and so the aggregate of effective Demand suffers. On the other hand, in so far as the relief of such unemployment is assured as an obligation of the State, and taxes raised in proportion, the purchasing power of the employed classes of the community is also reduced. The net effect is to depress prices.

(*c*) As regards the Price-Level, Rationalisation, by increasing the output per unit of production, is able to offer lower prices than before the rationalisation was effected. But, in so far as Rationalisation takes the shape, either of combination and monopoly, which aims at such a volume of sales as would bring the greatest profit to the combine, it is unlikely to reduce prices inconsistently with this central objective of private, profit-seeking monopolies. In an age of falling prices, cartellised industry in Germany, for example, has managed to keep up a fairly high level of prices, as indicated in an earlier part of this Lecture. Only, if the State enters into the field, and Prices are controlled by Government decree, or legislative authority—as was done in Britain during the War, or as is being done in the United States since President Roosevelt came to office—there may be some hope of a price reduction in proportion to the real economies effected in the operation of the industry.

This is, of course, apart altogether from such reductions in prices as monopolist producers may effect in order to stimulate their sales; or what is brought about by dumping upon foreign markets by such monopolists, as may be in secure possession of their home-markets. That kind of price reduction is necessary and advisable in the Monopolists' own interests, and frequently occurs. But it does not affect the main argument. The Price fall resulting from such influences, as dumping by a country like Russia of her surplus produce not wanted for home consumption, is different in nature, as well as incidence.

Finally, the fall in prices brought about by the decline in the purchasing power because of the unemployment caused by Rationalisation, or by a restriction of currency and credit facilities, is also apart from the direct effect of Rationalisation. At the present time a number of these last mentioned factors have been in operation simultaneously, and they explain the Depression in prices to a much larger degree than the influence of Rationalisation.

APPENDIX TO LECTURE V.

(Compiled from the League of Nations Publications on *Production and Trade*)

Countries.	1925	1926	1927	1928	1929	1929 Percentage of 1925
Canada (Pig-Iron in metric tons) ..	606	827	778	1,100	1,188	196.0
,, (Steel in metric tons) ..	765	789	922	1,255	1,400	183.0
,, (Motor Vehicles) ..	162	205	179	242	263	163.0
,, (Electrical Energy) ..	10,110				17,633	174,0
,, (a)(Wood Industry) ..		99	94	80	81	
..		99	96	84	90	
,,(b)(Paper & Printing Industry) ..		124	136	157	180	
U. S. A. (Pig-Iron in metric tons) ..	37,257	39,970	37,117	38,736	43,298	116.2
,, (Steel in metric tons) ..	46,122	49,069	45,656	52,371	57,339	124.3
,, (Mechanical Engineering Industry) ..		108	92	158	187	119,0
,, (Demand for machine tools) ..						
,, (Demand for foundry equipment) ..		106	93	130	148	114,0
,, (Shipbuilding) ..	78·8	115·2	124·3	86·1	100·6	128,0
,, (Motor Vehicles) ..	4,266	4,301	3,401	4,359	5,358	126.0
,, (Electrical Energy) ..	65,870				97,352	148.0
,, (Textile Industry) ..		100	109	103	111	107.0
,, (Silk Industry) ..		100	110	114	124	109.0
,, (Artificial Silk) ..	23·5				55·4	235,0
,, (Rubber Industry) ..		100	104	124	116	
,, (Leather, Boot & Shoe Industries)		102	107	107	109	
,, (a) (Wood Industry) ..		99	94	80	81	
		99	96	84	90	
,, (b) (Paper & Printing Industry). ..		108	107	111	118	

APPENDIX TO LECTURE V. (*Contd.*)

Countries.		1925	1926	1927	1928	1929	1929 Percentage of 1925
Japan.	(Pig-Iron in metric tons) ..	933	1,135	1,285	1,540	1,562	167.4
,,	(Steel in metric tons)	1,336	1,548	1,728	1,955	2,343	175.0
,,	(Shipbuilding)	55.8	52.4	42.4	103.7	164.7	295
,,	(Electrical Energy)	8,172				12,036	
,,	(Silk Industry)		108	117	119	116	98
,,	(Artificial Silk in metric tons) ..	1.3				14.0	1100
,,	(Paper and Printing Industry) ..		112	123	140	152	
Belgium	(Pig-Iron in metric tons) ..	2,543	3,368	3,709	3,857	4,041	158·9
,,	(Steel in metric tons) ..	2,549	3,339	3,680	3,905	4,110	161·2
,,	(Motor Vehicles)	6	6	7	8	7	116
,,	(Artificial silk in metric tons)	5.0				7.3	146
,,	(Paper and Printing Industry)		106	111	123	128	
France.	(Pig-Iron in metric tons) ..	8,505	4,430	9,295	9,891	10,447	122.8
,,	(Steel in metric tons) ..	7,464	8,617	8,375	9,500	6,699	129·9
,,	(Mechanical Engineering Industry)		115	99	120	137	114,0
,,	(Shipbuilding)	75.6	121.3	44.3	81.4	81.6	108,0
,,	(Motor Vehicles)	177	193	191	223	250	141,0
,,	(Electrical Energy).. ..	10,222				14,327	140,0
,,	(Textile Industry)		111	106	116	108	93,0
,,	(Silk Industry)		105	87	110	91	83,0
,,	(Rubber Industry) ..		119	109	117	172	
,,	(Leather, Boot and Shoe Industry)		123	99	125	114	
,,	(Paper and Printing Industry).		108	100	105	128	

APPENDIX TO LECTURE V—*Contd.*

Countries.		1925	1926	1927	1928	1929	1929 Percentage of 1925
Germany.	(Pig-Iron in metric tons)	10,089	9,636	13,089	11,804	13,401	132.8
,,	(Steel in metric tons)	12,119	12,264	16,167	14,369	16,246	134·1
,,	(Mechanical Engineering Industry) ..	..	85	112	122	122	100,0
,,	(Shipbuilding)	406·4	180·5	289·6	376·4	249·1	61,0
,,	(Motor Vehicles)	70	51	125	149	135	193.0
,,	(Electrical Energy)..	20,328	..	..	..	30,661	151,0
,,	(Textile Industry)	..	90	124	111	104	94,0
,,	(Silk Industry)	..	101	134	120	128	107,0
,,	(Artificial Silk in metric tons).. ..	11·8	..	..	..	25·0	212,0
,,	(Rubber Industry)..	..	54	105	100	114	..
,,	(Leather, Boot & Shoe Industries)						
	Leather production	..	88	116	100	93	..
	Leather manufactures	..	82	116	96	85	..
,,	(Paper and Printing Industry).. ..	..	97	117	122	124	..
Italy	(Pig-Iron in metric tons)	536	559	529	554	727	135·6
,,	(Steel in metric tons)	1,786	1,780	1,596	1,960	2,143	120·0
,,	(Shipbuilding)	142·0	220·0	101·1	58·6	71·5	50.0
,,	(Mtor Vehicles)	64	63	59	74	91	142.0
,,	(Electrical Energy)..	6,545	..	..	..	9,749	150.0
,,	(Silk Industry)	..	86	98	109	108	99,0
,,	(Artificial Silk in metric tons)	13·9	..	..	..	25·8	191,0
,,	(Paper and printing Industry) ..	..	85	75	81	86	..

APPENDIX TO LECTURE V. (*Contd.*)

Countries.	1925	1926	1927	1928	1929	1929 Percentage of 1925
United Kingdom. (Pig-Iron in metric tons) ..	6,362	2,498	7,410	6,716	7,711	121·2
,, (Steel in metric tons)	7,504	3,654	9,243	8,656	9,791	130·5
,, (Mechanical Engineering Industry) ..	..	86	124	127	136	108.0
,, (Shipbuilding)	1,084·6	639·6	1,225·9	1,445·9	1,522·6	149.0
,, (Motor Vehicles)	167	198	212	212	239	143.0
,, (Electrical Energy)	11,278	..	..	..	17,392	154.0
,, (Textile Industry)	..	93	102	96	100	108.0
,, (Silk Industry)	..	106	98	112	127	113.0
,, (Artificial Silk in metric tons)	13·5	..	..	..	25·8	191,0
,, (Rubber Industry)	..	97	135	133	209	..
,, (Leather, Boot and Shoe Industry) ..	..	95	104	116	92	..
,, (Paper and Printing Industry)	..	107	119	107	135	..
U.S.S.R. (Pig-Iron in metric tons)	1,289	2,206	2,966	3,282	4,018	311·7
,, (Steel in metric tons)	1,868	2,900	3,636	4,104	4,723	252·8
,, (Mechanical Engineering Industry) ..	..	..	.	..	..	141.0
,, (Electrical Energy)	2,274	..	..	..	6,465	284.0
,, (Silk Industry)	..	..	..	..	..	130,0
,, (Paper and Printing Industry)	..	124	131	141	139	..
World (Pig-Iron in metric tons)	76,731	78,740	86,745	88,556	98,336	128·2
,, (Steel in metric tons)	90,484	93,296	101,918	109,947	120,509	133·2
,, (Shipbuilding)	2,193·4	1,675·0	2,285·7	2,699·2	2·793·2	127.0
,, (Artificial Silk in metric tons)	86·6	..	..	..	200,8	232.0

LECTURE VI.

PRICES IN THE UNITED STATES.

I have told you, at the outset of this Series, that I shall discuss the Price-movements in the United States in a Lecture by itself. This is a huge country, larger than the whole of Europe put together, excluding Russia; and has enormous resources within its frontiers, which are not even now all fully developed. She has a rich population—rich, if not in numbers, at least in skill and enterprise, capital equipment and political prestige. She has had---before the last war—fifty years of unbroken peace within her own territories, and practical immunity from foreign aggression and invasion, almost ever since she became an independent sovereign State. Industry has been widely and intensively developed, not only because of the rich initial endowment in soil and climate and mineral resources, but also by every device of man's making. She has pursued a policy of protective tariffs to give every advantage to her local industry, for securing undisputed possession of the local market. She has arranged international agreements--and has now international credit—which provides her local industry with unrivalled opportunities to capture foreign markets, if and when the people of the States should feel disposed to try that venture. There is nothing under the sun the United States cannot produce within their own frontiers, if they were so minded ; and their own population is large and varied enough to consume, at pinch, all the local produce of their agriculture and industry, their mineral, forest and marine resources, without any vital dependence on foreign markets for the continued prosperity in the States. Even without any special stress, America's local trade is several times greater than her overseas commerce, as the subjoined figures indicate.*

Relation between production and Export of Manufactured Goods in the U. S.

* Year.	Percentage of Exports to Production.
1899	9.8—10.5
1904	8.6— 9.2
1909	7.3— 7.8
1914	9.3—10.0
1919	13.9—14.6
1921	9.8—10.3
1923	6.7— 7.0
1925	7.6— 8.0
1927	7.7— 8.0

These figures are taken from an article on the Increasing Efficiency of American Industry in the *Economic Journal*, Dec. 1930. p. 581. See also, Anderson's *Value of Money*, pp. 267-278, where he estimates the percentage of domestic to foreign trade as 10 : 1 in 1910,-the lowest in the period 1890-1916. The table given on pp. 277, (op. cit) shows a variation from 17.9% iu 1916, to 9.9% in 1910.

By the time the European War broke out, American industry was already unrivalled in production all over the world. The United States had become the granary and the workshop of the world. She was not yet, as Britain had been in the heyday of her ascendancy, the Banker and the Carrier of the world's commerce. But the war brought her immense opportunity to develop her industry, expand her trade, strengthen the bonds of her investments abroad, widen the base of her local and international credit, and lay the foundation of an overseas carrying trade that had brought immense invisible gains to Britain. For 3 years after the European nations had declared war and were engaged in mutual slaughter, America was the sole provider for their warring millions. With their industry diverted and their trade destroyed, European countries were unable to make even a stand for their economic ascendancy. America was, between August 1914 and March 1917, at peace with both sides in the European conflict, and reaped an impartial and a yearly increasing harvest of profit by unbiassed supplies of the munitions of death and slaughter to all belligerents alike. She employed these profits to buy out her own old debts, and then to lend new sums to belligerent governments to fortify her hold upon them when peace returned.

When at last the United States joined the war on one side, the struggle had come to a point, where the inherent superiority of American industry and man-power proved decisive, and could alone be relied upon to make victory for the Allies certain. The actual *modus operandi* for establishing peace, and the final terms of the Treaties of Peace were by no means to American liking ; and so the United States refused to entangle themselves further in the European complications, by even so much as membership of the League of Nations. They, therefore, resumed their normal peace-time effort, with the least dislocation of industry and commerce to set right, with the least transition from war-time to peace-time organisation being necessary. A few regulations—such as those about Silver—had to be relaxed or removed; a few arrangements—like the Morgans' with Britain to maintain Anglo-American exchange at a pegged point—had to be dissolved ; some loss or wastage to be written off ; some debts, especially war-time loans to the allied governments, to be settled; and the United States would have no obstacle to their onward march.

The foreign trade of the United States had grown considerably during and because of the war ; and though, when

the war demand came to an end that particular type of trade declined, thanks to the bonds American Capital invested abroad had formed, the post-war trade did not show an excessive set-back. A reaction, no doubt, set in in the United States earlier than in any other countries directly concerned in the war ; and the price decline of 1920-22 was felt probably more severely in the United States than in any other country. But, as the following table shows both price-recovery and trade recovery was expedited in the spurt that followed the temporary settlement of the European complications as exemplified by the Dawes Plan.

All this Trade Recovery is due to the great spurt in the growth of American Industry as shown in the following Table. *

*Statistics relating to the Foreign Trade, Investments and Whole-sale Prices in the United States (in million Dollars)

	Merchandise		Investments	Whole sale Prices.
	Imports	Exports		
1915	1,630	2,721		
1916	2,140	4,220		
1917	2,589	6,125		
1918	2,677	5,761		
1919	3,015	7,037	385	221
1920	5,278	8,080	527	140
1921	2,509	4,379	635	139
1922	3,113	3,765	280	144
1923	3,792	4,091	997	141
1924	3,610	4,498	1086	148
1925	4,228	4,818	1145	143
1926	4,408	4,712	1561	137
1927	4,163	4,759	1320	139
1928	4,078	5,030	759	137
1929	4,339	5,157	1009	124
1930	3,114	3,781	254	105
1931	2,088	2,378	26	93
9932	1,325	1,576		93
1933	1,112	1,280		105
1934				

The figures in Col. 4 are taken from an Appendix to the *Course and Phases of the World Economic Depression*, and represent the net amount of foreign capital issues in the U, S, A. It is brought upto date from a Table in the *World Economic Survey* (1933-34) p, 303.

The great development in American Industry and Agriculture, which characterises the present century, has already been noticed in part, and may be shown in summary form in the subjoined table.

Increase in Productivity of Major Branches of Industry.

Period and branch.	Number of workers (thousands).		Index for end of period (beginning=100).			Weight value at beginning (millions of dollars).	Weighted index (end).
	Beginning of period.	End of period.	Workers.	Output. (a)	Output per worker.		
1898-1900 to 1908-1910.							
Agriculture	10,700	11,400	106.5	113	106	3,500	3,955
Mining	600	1,010	168.5	190	112.5	600	1,140
Manufactures	5,300	7,430	140	150	107	4,830	7,240
Railways	970	1,575	162.5	185	114	1,300	2,405
Total or average ..	17,570	21,415	122	144	118	10 230	14,740
1908-1910 to 1918-1920.							
Agriculture	11 400	11,300	99	119	120	6,100	7,259
Mining	1,010	1,050	104	145	140	1,240	1,798
Manufactures	7,430	c 10,930	147	145.5	99	8,530	12,410
Railways	1,575	2,035	129	162	125.5	2,390	3,872
Total or average ..	21,415	25,315	118	139	117.5	18,260	25,339
1918-1920 to 1924-1926.							
Agriculture	11,300	10,700	95	114	120	15,700	17,898
Mining	1,050	1 050	100	127	127	3,175	4,032
Manufactures	c 10,780	c 9,810	92.5	122.5	134.5	24,750	30,320
Railways	2,035	1,860	91.5	100	109	5,040	5,040
Total or average ..	25,165	23,420	93	118	127	48,665	57,290

Period and branch.	Number of works (thousands).		Index for and of period (beginning=100·)			Weight value at beginning (millions of dollars).	Weighted index (end).
	Beginning of period	End of period.	Workers.	Output (a)	Output per worker.		
1898-1900 to 1924-1926.							
Agriculture (a)	10,700	10,700	100	153	153	3,500	5,355
Mining	600	1,050	175	348	199	600	2,088
Manufactures	5,300	(c) 9,950	189	268	142.5	4,830	12,940
Railways	970	1,860	192	299	156	1,300	3,887
Total or average	17,570	23,560	134.5	236	176	10,230	24,270
Mining, excluding: petroleum ..	576	858	150	244	163	..	..
Petroleum	24	192	800	1,268	158	..	..

a. Average for all branches computed by weighting component indexes according to the relative importance of the several branches in 1899, as determined by value of product, given in next to last column of table.

b. Averages for all branches computed by dividing the average index of increase in output by the actual ratio of total workers at end of each period to total at beginning. The figure exceeds the weighted average of the index of output per worker in the several branches, because the largest increases in number of workers occurred in those branches in which average value of output per worker was relatively larger.

c. The differences in the figures given for number of persons employed in manufactures for 1919 and 1925 are due to changes in the size of establishments covered, and to certain exclusions of industries formerly reported. The 1925 figure, for comparison with 1899, was estimated from the percentages of changes from census to census.

The aggregate production (or National Income) in the United States was estimated in 1927 by an official commission—as under—See *Recent Economic Changes*, Vol. II p. 764.

(in Billions of Dollars)	1914	1924 (1927)
Gross Income	37·2	79·4
Produced at home	0·0	0·9
Accrued Social Income produced at home	37·2	78·5
Net Received from abroad	0·1	0·6
	37·1	79·1
Per capita Income	$ 375	$ 697

*The corresponding figure for the United Kingdom is given at 17·2 billion Dollers in 1924, and $ 384 per head which at 1928 prices may not be materially different.

This total of money income was distributed between the several classes as shown in the marginal Table.

Items	Money Income 1925 Percentage.
Wages	42%
Salaries	20%
Pensions	1%
Total Employee share	63%
Rents & Royalties	8%
Interest	5%
Dividends	6%
Total Share of Property	19%
Entrepreneur's Profit	18%
	100

There has been a slight improvement in the share of the employee classes in the realised income, of about 4 % as compared to 1913, but it is difficult to say if that improvement is really permanent. Certainly the recent growth of unemployment must involve a heavy decline in the income of those classes. The distribution between the several industries, considered over several years, shows that agriculture is receding (11%) Merchandising is improving (15 %) manufacturing (217%) and miscellaneous industry (20 %) maintain their place.

The 1930 price-level was about 30 per cent above 1913 Price level. The total realised income for 1928, given by the same authority (p. 763) s 89 billion Dollers, and the total money income at 81 billion. The per capita income is given there at $ 733 for 1926, which would give for 1928 the per capita figure at $ 750.

During this period, while the number of workers increased by 86.4%, the volume of production increased by 178.7%, and the output per worker increased 49.5%. Since 1929, however, American Industry has had a set-back, even more considerable than in European countries, as is indicated by the following table compiled from the League of Nations Publication on *World Production and Prices*, 1925-1933.

Production in certain Iudustries in U. S. A.

1925-29=100.

Article.	1930	1931	1932	1933	1934
1. Pig-iron & Steel.	82.5	48.0	22.8	34.5	51.5
2. Mechanical Engineering.	66	38	18.25	25.25	49
	68	34	12.75	24.5	39
3. Shipbuilding ..	251.5	289.8	160.65	17.75	31.7
4. Motor-Cars ..	77.8	54.9	32.25	44.45	64.4
5. Paper ..	98	92	78.5	82.25	83
6. Leather ..	91	89	84.25	96.25	101
7. Boots and Shoes.	89	93	91.75	104	107
8. Textiles ..	84	87	76.0	90.0	80
9. Tobacco ..	110.5	103.7	93.9	98.1	109.4

ECONOMIC DEPRESSION IN THE UNITED STATES.

Let us now study the nature and extent of that depression, and estimate the steps taken to remedy it.

The Economic depression began in the United States, and is reflected not only in a decline in prices, but also in a falling off in quantitative production, as the statistics just given would indicate.

The force of world factors and European conditions has been felt, perhaps most intensely in the United States of America, though the more spectacular havoc has been caused in that country in much more recent times. Taking the statistics of Foreign Trade as the most obvious index of the extent to which Depression has affected the country, the following figures of the American Foreign Trade tell their own tale, unparalleled even in the case of the United Kingdom.

The Foreign Trade of the United States of America.*

	Imports (In Million Dollars)		Exports (in Million Dollars)	
1929	4,339	100%	5,157	100%
1930	3,114	71·7%	3,781	73·3%
1931	2,088	48·1%	2,378	46·1%
1932	1,330	30·7%	1,577	30·6%
1933	1,112	25·7%	1,280	24·8%

While the imports of the United Kingdom have fallen in these five years to 38.3 % of the 1929 level, and Exports to 34.3%, in the United States the fall is much more serious and sustained, as the above figures indicate.

"The United States total Trade has fallen in value by almost 74.3 per cent in imports and 75.2% in exports, or relatively more than that of any of the other fifteen countries; and the fall is evenly distributed between imports and Export."†

True, the aggregate of the foreign trade does not occupy the same place in the national economy of the United States that it does in Britain, or even in Germany, or France. The internal trade of that vast country is probably ten times as considerable and valuable as its foreign trade ; and as the domestic market of America has been rigidly protected against the competition of the cheaper products of European economy, the fall in the aggregate of the foreign trade need not, at first sight, occasion the same uneasiness to the American statesman as it might do to his European confrere.‡

* The World Trade has fallen to 35%, as against American trade falling to 25%.

† *World Production and Prices* 1933. p. 30.

‡ Under the influence of world Depression, and owing to the force of Exchange control in many countries,—as also because of the practical cessation of investment of American Capital abroad, the foreign trade of America became unduly more depressed. As the President has been granted powers to negotiate and carry into effect reciprocal trade agreements under the tariff Reciprocity Act, trade may show some recovery.

There are, however, serious reasons why a fall in the Foreign Trade should directly affect the internal prosperity of the United States; and thereby react on the general prosperity of all those countries and communities with which that gigantic unit of our times may be directly or indirectly connected. Not only does the reduction in the Export trade of America cause Unemployment in that country—at least 3 million of such unemployment are estimated to be ascribable to this cause—but reduced exports prevent this wealthy community from continuing to absorb the same value of other countries' produce, that, despite its tariff walls, it used to consume. The imports have, accordingly, shown the same decline as the exports. Though, the domestic market is sheltered by tariff walls, the tariffs have had to be still further raised, because of the apprehensions of American producers regarding the influx of goods that were not fairly competing with them. The dutiable goods in the American Imports Schedule amount to a third of the aggregate; and the average import duty on these, in 1929, amounted to 40%. These were, however, raised, in 1930 to 45%; in 1931 to 51%; and in 1932 to 58%. * This—a remedy that only deepens the disease—only helped to check still further the imports, and so affect the world trade and intensity Depression.

But the American people thought they had no alternative, when they saw countries like Great Britain—most vitally concerned in the maintenance of free international exchanges—not only going off the Gold Standard, but also adopting Fiscal measures and policies, which could only end in stifling the trade of the world daily more and more. The abandonment of the Gold Standard by Britain, in 1931, caused a severe strain on the economic, and particularly the credit, position in the United States. For, while in the middle of 1930, the exports of manufactured goods from the united States, Britain, and Germany—three of the leading industrial countries of to day—were almost equal in the world markets, in the last quarter of 1932 these goods represented only 52.2% of the German exports, and 61.6% of the British exports of corresponding articles.† It is signi-

* Cp. Op. Cit. p. 38. The burden of Specific Duties--a considerable item in the American fiscal system,-must be inevitably growing in the days of falling prices.

† Quantum Base 1929=100

Exports from	1930	1931	1932	1933
United Kingdom	82	63	63	64
Germany	95	86	59	60
U. S. A.	83	68	53	53

ficant, that while Britain had discarded the Gold Standard in the interval quite frankly, Germany had been imposing Exchange restrictions of an utterly unprecedented character. The United States thus remained alone, at the end of 1932, with France, to bear the burden of a rigid gold standard.

The trade position in the United States is significant, in any consideration of the present Depression, for another reason. Before the Depression came upon her, America was wont to maintain her international credit, and settle the balance of payments due to or from her, partly by the help of tariffs ; but largely, in post-war years at least, by the exportable surplus, which generally took the form of capital investments abroad.* As already shown in an earlier chapter, America had been a very considerable lender to Germany for the rationalisation of its industry. With the short-

*The following figures of the U.S. Balance of Payments are taken from the *Economist* of May 11, 1935. p. 1070. The United States Department of Commerce has issued the preliminary figures of the Balance of International Payments in 1934. The following table shows the figures for the whole year 1934 as well as for the years 1929 and 1929. A plus sign denotes a credit or in-payment, a minus sign a debit or out-payment :—

($ millions)

	1929	1933	1934 Whole Year
Merchandise trade (inc. silver)..	+840	+224	+392
Tourists' expenditures ..	—638	—220	—228
Immigrants' remittances ..	—264	—132	—124
Miscellaneous service items ..	— 56	—102	— 10
Interest and dividends ..	+564	+388	+265
Balance on current account.	+446	+210	+295
Gold movements ..	—120	+172	—1,217
Currency movements ..	— 14	— 90	— 48
Total ..	—134	+ 82	—1,265
Purchase and sale of securities	— 78	+ 10	+ 105
Sinking fund payments, direct investments, arbitrage, etc...	— 62	+ 38	+ 116
Short-term capital ..	— 80	—384	+ 200
Balance on capital account...	—220	—336	+ 421
Errors and Omissions ..	— 92	+ 42	+ 549

lived boom of 1928-29, the American capital invested abroad sought to be repatriated; and the process caused its own difficulties and dislocation to the European debtors of America. In proportion as the flow of capital from America dried up, the balance of payments due to her became daily more embarrassing to her debtors to liquidate, especially as the high tariff walls of the United States rendered any penetration by foreign goods impossible. The increasing difficulties of America's private, commercial, debtors in liquidating their obligations rendered the American investor more nervous than ever in seeking foreign employment for his surplus; and though that surplus has fallen, from 818 million Dollars in 1929, to 168 million Dollars in 1933, the problem it created affected adversely both the internal economy of the States, as well as the international situation.*

The first fruit of this reaction was the import of Gold, which, as it accumulated in the vaults of the Reserve Banks, served to depress the domestic prices of American produce. The growing weakness of America's European debtors and customers only helped to discourage still further foreign investment, and so was brought about a decline in that portion of the American income from abroad, which represented the interest on America's foreign investments. Finally, the mechanism of a triangular settlement of international balance of payments—whereby the American payments due to African or Asiatic countries were set off against American claims upon the European creditors of the latter, — was also destroyed, or put out of gear, during these hard years. The entire machinery of international credit and exchange, together with the internal economy of such a large unit as America, were thus thrown completely out of order.

American capital was thus forced to seek employment at home. At first, the sheltered nature of the American domestic market, coupled with the birth of new industries, and the rapid rationalisation and modernisation of old industries, seemed to make investment at home much more attractive. It was more safe, even if less paying. But the continued fall in prices—which, as in all Gold Standard countries, fell steadily and heavily up to February, 1933, in the United

*From the peak of foreign investment of U. S. A., reached in 1928, at $941 million, the item fell to 566 in 1929. and has disappeared altogether from 1932 to 1934. Cp. *World Economic Survey,* (pp. 335) 1933-34.

States—made the American Security prices follow, and sometime lead, the downward curve with faithful accuracy. Other securities,—besides the Governmental, Municipal, or established industrials, — took the form of mortgages on landed property, which only added to the difficulties through which the community was passing. For, the fall in the value of agricultural production was even more severe and precipitous than in that of industrial commodities.* The agriculturist could not reduce his working cost, or fixed charges of taxation, interest, etc., so readily as to permit of a profit on land cultivation. Agricultural production could not, also, resort to the safety-valve of shutting off temporarily, so as to avoid further addition to existing and accumulating stocks, as manufacturers could do. The result was, that American Banks,—from whom came the funds for financing these farm mortgages,—in the last analysis. Began to carry a growing proportion of their assets in a form increasingly less and less realisable.†

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* Says the League of Nations Publication : *Worlds Production and Prices*, 1925-33 (Geneva, 1934) "The deterioration in the terms of exchange of agricultural for non-agricultural products, between 1929 and 1933, is strikingly illustrated in the figures for the United States, where the prices received by the farmers fell by 64 per cent. between February 1929 and February 1933, while the prices paid by them fell by only 34 per cent. The purchasing power of agricultural products over the things commonly bought by farmers declined by almost 45 per cent in these four years, and there can be no doubt that this was one of the basic factors in the general economic depression". op. cit. p. 105.

There has been, Since February 1933, an improvment in agricultural prices, which, in the U.S. was recorded at 38 % as between January 1933 to January 1934, while as compared to January 1929, the agricultural prices of January 1934 show a decline of 45% Wholesale prices have improved in the United States between February 1933 and February 1934 by 23 points, though, as measured in gold, they continue to be 53 points below the wholesale price level of February 1929; and even as measured in Dollar currency, 23 points below February 1229. (op. cit. p. 89-113)

†The actual process whereby the farm mortgages came to embarrass the Banks, and precipitate a banking crisis in the States at the end of February last, was somewhat as follows : The American Banks, used to regard the farmer's chief possessions—like stock, or produce–as the best, because the most liquid, security, had always loaned readily and heavily to the farmer on these securities, taking land only, if at all, as collateral. When the prices of agricultural produce fell steadily,-as they did in America all though the decade 1921-31, the margin of security was lost ; so the real estate or the land itself became the chief security. The action of the Farm Board in loaning to farmers to enable them to hold up their stocks in the vain hope of prices rising made matters only worse. The "Frozen assets"

(Contd. on next page.)

This gave the finishing touch, as it were, to the thickening gloom of Depression in America. Banking was always considered to be a weak spot in that otherwise fairly well organised country. It was, despite, the institution of the Federal Reserve Banks in 1913, a wholly decentralised-system, in which practically each Bank operated on its own, in a local area and clientele. The strength and solidity that are derived from co-ordination and centralisation were essentially lacking in American Banking* When, therefore, security prices, bond prices, commodity prices, came all tumbling down, after the short-lived boom of 1928-29, the Loans and Investments of these isolated and unco-ordinated institutions caused the first serious alarm to the rulers of America as to the state of affairs at home. The growing number of bank failures, all through the summer of 1931, could not all be explained away by the heavy unloading of American bonds by the British banks and investors, owing to Britain going off the Gold Standard, and the consequent depreciation of the pound sterling. In a single month in October, 1931, Bank failures rose to 522.

The remedy proposed took the form of a National Credit Corporation, to make the stronger banks assist their weaker

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of American Banks were thus of enormous dimensions. And so when, in their embarrassment, they tried to liquidate by calling in their loans and mortgages, they only found that the farmer had no means to pay up. The Banks, therefore, themselves failed ; and their liquidators or successors affected the farmer still in debt even more adversely, because of their desire to foreclose the outstanding mortgages, or to call in the loans, and of course curtail or refuse altogether further credit. It is perhaps because of this situation that the reform in the Bankruptcy law was effected as one of the last measures of the "Lame Duck" congress of 1933, whereby the process of bankruptcy was made much more economical, and the principle of voluntary arrangement with creditors was substituted for compulsory judicial process.

Summary of condition of U. S. Banks.*

(In Million Dollars)

		No. of banks.	Deposits.	Loans.	Investments.
Dec. 31, 1929	..	24680	55289	41898	16519
Dec. 31, 1930	..	22769	53039	38135	18074
June, 30, 1931	..	21903	51784	35384	19637
Sep. 29, 1931	..	21294	49152	33750	19615
Dec. 31, 1931	..	19966	45821	31305	18399
June, 30, 1932	..	19046	41963	27834	18237
Sep. 30, 1932	..	18794	41779	26985	18867

(Contd. on next page)

brethren. But this measure of self-help could not operate to hundred per cent efficiency in a strongly individualistic society, since the stronger banks were naturally unwilling to weaken themselves by taking over the frozen assets of the latter. President Hoover thereupon converted this Corporation into the Reconstruction Finance Corporation, by an Act of the Legislature, under which a total of $ 2,000 million was made available to assist foundering banks and refinance industry, agriculture; and commerce. But, despite the liberal policy and action of this Corporation, which had advanced over $ 600 million to relieve American farmers, as against a total volume of farm debts estimated at $12,000 million,—the seed of disaster had been rooted too firmly to be so easily eradicated. Country banks began to close down, or suspend payments, with alarming frequency ; and their weakness was reflected increasingly in the position of the stronger banks also.

The crisis came in February, 1933, when State after State of the Union found its banks unable to meet their obligations, and so forced to declare a general banking holiday The situation was at its darkest on Friday, March 3, the eve of the inauguration of the new President. He extended the the Banking holiday, and called upon Congress to take energetic and radical steps to cope with the emergency. I cannot in this Lecture go into the details of the action taken by President Roosevelt to meet the financial crisis, and remedy the economic Depression in the States. Suffice it

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Statistics of Bank Failures in U. S.

Period.		Banks Suspended. No.	Banks Suspended. Deposits. $ Million	Banks Reopened. No.	Banks Reopened. Deposits. $ Million.	
Jan.-June 1929	..	354	98	98	26	(in the whole year)
July-Dec. 1929	..	288	136	..	..	
Jan.-June 1930	..	468	209	147	62	„
July-Dec. 1930	..	868	655			
Jan.-June 1931	..	687	421	276	158	„
July-Dec. 1931	..	1611	1271			
Jan.-June 1932	..	818	490	166	101	
July-Dec. 1932	..	635	240	124	174	

For detailed explanations and illustrative statistics, cp. "Why the Banks Collapsed", by Prof. B. Ostrolensk, in the *Current History* for May, 1933, p. 152-58.

to note here that America practically went off the Gold Standard on the day the gold embargo was imposed by presidential decree, even though the Gold Clause in the Constitution of the United States was deleted later; that this action in itself tended to afford relief by the possibility it held out of an improvement in prices, thanks to an easier competition with countries which were no longer on a gold basis; and that more direct relief was resolved to be given from national resources, in a manner and to a degree, which, in comprehensiveness and thoroughness, compared most favourably with the haphazard action taken under similar circumstances in Britain *.

Amongst the causes contributory to the deepening of the Depression in the United States, mention has already been made of the departure of Britain from the Gold Standard, despite that country's immense stake in international commerce and credit. The conditions in Britain were by no means similar to those of the United States. As we have already noticed from comparative foreign trade statistics of the two countries, while Britain had a heavy adverse balance of trade, America had, even in the worst years of the Depression, a favourable balance.† Britain's passive trade balance used, in normal times, to be liquidated by her "invisible exports" consisting of services in banking, shipping, insurance, and interest on foreign investments, all of which however, had suffered so heavily owing to the World Depression, that a normally credit balance of over £250 million was converted in 1930 to a debit balance of about £40 million, rising to £100 million and more in 1931, and being estimated at over £25 million on the wrong side even in 1932, despite stringent measures to correct this adverse balance. With this adverse balance of payments, Britain had to face a severe drain on her gold resources, which became unbearable and unrestrainable in the summer of 1931, leading eventually to an abandonment of the gold moorings of the pound sterling.

* Cp. the March to August Numbers of the *Current History* for a detailed survey and explanation of those measures. The abrogation of the Gold Clause has formed the subject matter of litigation before the Supreme Court; but the Court, by a narrow majority, held that on public obligations the congress could abrogate the clause; and as for private individuals, the aggrieved party had no remedy.

† See Trade Statistics, *ante*, p. 136. The favourable balance of merchandise was as high as $1000 million in 1928, but has fallen to barely 17 p. c. of that amount in the latest year under report.

America's position was, in all these respects, radically different. She had always had a credit balance in foreign trade; and since the war also in international payments. She had no remittances to make abroad to meet an adverse balance; but the growing competition of British commerce in world markets, thanks only to a depreciated local currency, was steadily reducing America's favourable balance of international payments. Even so, it remained a positive, or a credit, item to the last; and so avoided the strain on her foreign exchanges which Britain was exposed to in 1931 summer.

The crisis, therefore, when it came upon America, was domestic rather than international. The Amercian internal situation was far from satisfactory, again, not because the industrial or the general economic organisation of the country was weak, but simply because the fall in prices, coupled with injudicious investments by American banks in local securities, had intensified the elements of weakness that scared the American financiers and publicists. America, moreover, was by no means so dependent for home prosperity on foreign trade and international credit, as Britain,claiming to be the banker and the clearing house of the world, was. America's foreign trade is about a tenth of her home trade; while Britain lives almost wholly on foreign trade. The dismooring of the Dollar from gold had, accordingly, not the same danger to American credit, which the corresponding action in Britain had to that country's credit. The measures of recovery in the United States could, therefore, well be mainly inspired by considerations of domestic prosperity, regardless if need be, of their international reactions; while the similar measures in Britain could not afford to neglect the latter factor. While America has shut off foreign investment in recent years as a matter of punishment to the Defaulters, Britain had to adopt the same measures to protect her own industry, and permit her conversion of costly, unproductive War Loans. While American Protectionism—whatever its origin—is now a measure of maintaining its high internal standard of living, Britain's change of policy in the same direction, after a century of Free Trade, is a matter of self preservation. While America is able to devote large sums through Government agency to projects of national development,—the latest project reported in this behalf contemplates an outlay in 25 years of some 105,000 million dollars,—all Britain's surplus wealth is still

needed to bear the unproductive burdens of the last war. And while the per capita wealth in Britain to-day, allowing for price depreciation, cannot be much above $250 per annum, the U. S. A. per capita income must even to-day be in the neighbourhood of $400. p. *a*.

This contrast with Britain is necessary to emphasise, because of two main considerations on which the economic crisis in Britain seems, in the perspective of history, to have direct bearing on that of the United States. Because of the fall in prices, and the consequent decline in local prosperity, the national finances of the United States were showing a heavy deficit. This could be corrected, people thought, by economies and retrenchment in expenditure, by additional taxation, and, in the last instance, by additional fiat money. One item, however, in the American national budget, consisted of receipts under the funding agreements with the debtors of the American Government, of which the British Government was the most considerable, and seemed to be the most solvent. The payment in respect of this War Debt to America, in the days when Britain's own receipts from foreign investments were steadily falling, was a serious factor in weakening the sterling exchange, and causing a gold drain from Britain, which eventually forced that country off gold. Britain, however, has, since 1932, raised the cry of inability to bear this War Debt burden, which, she has urged, has been materially raised, thanks to a phenomenal rise in the value of money. America, on the other hand, cannot see her way to forego her claims under the Funding Agreements,—which had cut down substanially the original contractual obligation even with Britain,—since, to do so, would mean a corresponding increase in the tax burdens on her own citizens; and that, too, without any *quid pro quo*. Britain has urged, in vindication of her claim for reconsidering the debt agreement, that, even if the European debtors were to make these payments, they could do so only in goods and services in the last instance. But America keeps a rigid and high tariff wall, barring out these goods and services from abroad ; so that, even if the debtors of America were willing and able to make the payments, the action and policy of the American Government renders that course impracticable..

There is no substantial reply to this on the American side, except the known inability of the Europeon debtors to provide a real export surplus from their own sources,

especially while they are committed to such heavy outlays on armaments, and other similar unproductive expenditure. America has, accordingly, coupled—until very recently—the question of Inter-governmental debts with those of Disarmament, which the European countries, in their turn, are unwilling to combine into one complex problem. In their eyes, therefore, America seems to pursue the policy of Shylock, when she refuses to reconsider the Debt agreements; and so their response has taken the form of a unilateral abandonment of the international. Gold Standard, which has only served to embitter and exasperate America. She justly regards such action as a sign of bad faith. Those who pursue such methods—the American inevitably comes to feel—can offer no guarantees of future good behaviour; and any concession to them would only prove futile, if not suicidal, to America. For, the departure from the Gold Standard has been sought to be utilised by countries like Britain as a means of economic and trade recovery—a menace, undoubtedly, to American industry in the latter's domestic markets, as well as in the common international markets.

The Debt controversy, and Exchange depreciation, are thus incidental to the American crisis, as it developed in the early months of the current year.

American authorities have, therefore, decided to treat the crisis in their country, not as a phase of the International Depression, but *essentially as a local phenomenon.** Their measures for Currency Reform and Banking credit stabilisation—including the embargo on gold exports, the abolition of the Gold Clause from the Constitution, the tendency to inflation, and the reorganisation of banking on sound lines—or those for industrial recovery, seem to be inspired solely with a desire to rehabilitate America, no matter what the consequences to the world may be. America can afford to adopt this attitude, since she is able, should the worst come to the worst, to retire into her own shell and be self-sufficient. If her foreign trade, and even if her international credit, be destroyed, the United States care nothing for such consequences, if only American Agriculture can be salvaged,

* Says the *World Economic Survey* for 1932:33 (p. 309): "The importance of the American development plan..is to be found primarily in its effect upon the domestic recovery of prices and production within the U.S. Concentration upon domestic recovery has implied, not so much the disturbance, as the neglect of International economic equilibrium"

American Industry revived,—sufficient for home market at any rate,—and American finance and credit reconstituted.

Let us review, briefly, these measures of economic revival in America, which bear out the general criticism given above.

1. Leaving out of consideration the emergency measures of a banking holiday and currency control, issued in the first week of the Roosevelt regime, the first of the measures for National Recovery to become law in the United States was the Farm Relief Act. It was based on the assumption that the main cause of the Depression was a shrinkage in Agricultural incomes. It aimed, therefore, at raising prices so that the things a farmer has to buy would, in the matter of prices, be on a par, more or less, with the things a farmer has ordinarily for sale. Under the provisions of this measure, the Secretary of Agriculture would be empowered :

(1) to obtain a voluntary reduction in the area under the plough for certain crops, the producers being compensated by rental or benefit payments for this sacrifice ; *

(2) to make marketing agreements with farmers and processors and others to organise commodity councils, which would advise on the most effective method of acreage reduction and the scale of taxation on processed goods ;

(3) to license "processors" and distributors where necessary to achieve the object of the measures ;

(4) to tax the "processing" of basic farm products, the proceeds to be utilised in compensation to the farmers reducing acreage ; †

*The reduction in crop in 1933 may be judged from the following figures (op. cit. p. 313.)

	1933 crop as percentage of 1932	of average of 1927-31.
Winter Wheat	73	54
Spring	60	63
Rye	64	63
Barley	57	63
Oats	56	59
Maize	69	80

The cotton harvest was similarly expected to fall in 1933 to 12·3 million Bales as against 13·3 .. in 1932
17·1 .. in 1931
13·9 .. in 1930
Government offered to pay $ 7 to $ 20 per acre ploughed down.

(† on the next page).

(5) particularly to allow farmers of cotton, reducing their acreage by 30%, to take options on the cotton held by the Federal Farm Board, etc., which the Department of Agriculture would buy;

(6) and, to re-finance Farm Mortgages, so as to protect farmers against immediate foreclosure, and to enable them to regain of their foreclosed property. Federal Land Bonds upto a maximum of $2000 million may be issued at 4½% to make loans to farmers at 5% out of the proceeds, so as to enable them to pay off mortgages carrying higher interest.

It was hoped that, by a combination of crop reduction through the curtailment of acreage, and the process tax on certain important farm products, the prices of the staple agricultural commodities would be appreciably raised. This measure was also utilised to tack on a provision for Currency Inflation, (the so-called Thomas Amendment) whereby the President was granted power:

(*a*) to expand Federal Reserve Credits, through open market operations, to the extent of $3,000 million;

(*b*) to issue a maximum of $3,000 million Treasury Notes;

(*c*) to reduce the gold content of the Dollar by not more than 50%;

(*d*) to fix a definite ratio between silver and gold;

(*e*) and to accept war debt payments in silver upto a maximum of $ 200 million.

Price raising of the principal agricultural products—wheat, cotton, hogs, dairy products, tobacco, rice, and beat

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† The "Processing Tax' amounts to the difference between current average farm prices, and the average purchasing power of farm product between 1909,-14 with respect to the articles the farmers buy. To put the farmers in the position of 1909-14, the fair exchange value of wheat ought, it was estimated, to be 88.4 cents, of cotton,12.4 cents, of hogs, 7.24 cents, and of maize, 64.2 cents. At the current prices of June 15, 1933, the Processing Tax on wheat was thus fixed at 30 cents the bushel. This tax is expected to be borne by the consumers

and cane sugar—was thus doubly assured, since their production came to be limited by domestic needs, and the domestic market was amply protected. *

II. A relatively less conspicuous measure was the Home Relief Bill, passed into law in May, by which mortgages on homes valued at less than 15,000 Dollars could be exchanged for Government 4% Bonds, to be issued by a special corporation to the extent of $2,000 million. This measure, coupled with the Farm Relief Act, would, it is hoped, bring down the rate of mortgage interest to a level 4½%, thereby permitting a very considerable saving to the farmer in his heavy burden of interest. This serves to place, by legislation, a limit on the rate of interest—a noteworthy measure in a hitherto highly individualistic country.

III. Measures for remedying the gigantic proportions of Unemployment in the United States took the still more radical form of the Muscle Shoals Act, later incorporated in the N. I. R. Act, which aims at manufacturing nitrate and producing electric power directly by the agency of the State, and so providing employment for a large number of the unemployed. An ambitious programme of public works and national development is envisaged in these measures, particularly the Wagner Act, allocating half of $500 million to the States and Municipalities within the Union which take up such projects of public utilities and national developments; the other half being granted to public authorities whose relief funds are exhausted. There was also an Act passed at the same time creating a civilian conservation corps, giving relief to 2,500,000 men in the national parks and forests.

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* The course of wholesale Prices in Dollars is given, in the *World Economic Survery for* 1933-34 (p 139) in the United States as follows—

March	1929	100
..	1930	93·9
..	1931	79·1
..	1932	68·7
..	1933	62·6
..	1934	76·7

The Gold Price level in March 1934 was 31·3 on the same basis. As between December 1932 and December 1933 the percentage change in Prices of Food stuffs was a rise of 31·7 (a fall of 17·2 % in gold) and of Raw Materials a rise of 28 (a fall of 18·5 in Gold)

(Cp. *World Production and Prices,* 1925–33 p. 98).

Another Act, establishing employment bureaux under the Federal Government, had the same objective.

IV. But the most ambitious project for national recovery—and the one which seems even now to be straining the popularity of the President, and the resources of his Government to the utmost--is the so-called National Industrial Recovery Act. This measure confers on the President power to set up machinery for:

" a great co-operative movement throughout all industry in order to obtain wide re-employment, to shorten the work week, to pay a decent wage for the shortened week, and to prevent unfair competition and disastrous overproduction."

The Act permits:

(*a*) the suspension of Anti-Trust laws, so as to permit of a thorough rehabilitation of American industry;

(*b*) and provides for the drawing up of new codes for fair competition, including wages to be allowed to the workmen;

(*c*) subject to the condition that the President would have the right to license business enterprises to meet exceptional cases of non-co-operation or abuse.

(*d*) Attached to the Bill is a public works programme, costing $3300 million for the relief, or remedy, of Unemployment.*

*The extent of the recovery actually accomplished in the U.S.A. up to March 1934, as given in the *World Economic Survey for* 1933-34 (p. 126) is shown below:—

Commodity.	Decrease from 1924 to lowest pt. 1932-33%	Increase from lowest pt. to March 1934, %	Increase or decrease from 1929 to March 1934, %
Producers' goods.			
Trucks	—81	+381	—10
Steel	—83	+354	—38
Portland cement ..	—80	+89	—63
Electric Motors ..	—92	+303	—65
Machine Tools ..	—93	+385	—66
Foundry Equipment ..	—95	+514	—67
Electrical Goods ..	—83	+59	—73
Wood working machines.	—94	+216	—82
Ships under construction	—99	+810	—88
Locomotives ..	—86	—80	—97
Durable consumer's goods:-			
Passenger-Cars ..	—91	+692	—27
Furniture	—80	+80	—68
Current consumption goods:-			
Shoes	—33	+71	+14
Tobacco products ..	—10	+45	+ 9
Cigarettes	—31	+37	— 6
Wheat-flour ..	—30	+24	—13
Books sold.. ..	—40	+43	—13
Food products ..	—17	+ 4	—13
Silk fabrics (consumption)	—48	+64	—15
Textiles (group index) ..	—48	+60	—17
Sugar Metings ..	—55	+62	—27
Gloves and mittens ..	—62	+72	—35

The suspension of anti-Trust laws is a sop to the capitalist, which brought about a wave of welcome when the N. I. R. A. was first announced. The rights of Labour seem to be safeguarded by the introduction of collective bargaining with Labour Trade Unions, and by fixing maximum hours of work and the maximum rates of wages. Those industries, which are concerned in export trade, are to be given some rebate from taxation imposed to give effect to the whole of the programme of national recovery. New taxes are imposed on the capital stock, on dividends, on surplus or excess profits, and on income, which may all be replaced by the Beer Tax since the Prohibition Amendment is abolished. Every considerable industry is required to work out its own code of fair competition on pain of the Government imposing their own code on default of the industry concerned to do so*. It may, finally, be noted that this measure is a temporary one, *i.e.*, for a period of two years, within which it is hoped the programme of the President would be accomplished.

V. Finally drastic economies in Federal expenditure, including a 15% cut in Government servants' wages, and a substantial reduction in the number and allowances of War Pensioners, have effected savings totalling $1,000 million per annum in round terms.

Though this vast programme of Governmental economies might seem, at first sight, to reduce the purchasing power of the American citizen, the series of measures just reviewed, taken together, would effectually insure the country against any such development. For the purchasing power of the largest section of the population—industrial workers and farmers,---would be more than proportionately raised, if all these measures bear the fruit they are intended to. America hopes, by these methods, to raise all-round prices by about 25% at least ; and, lest that aim be jeopardised, steps have been taken to devalue the Dollar, start gold and silver purchases, prevent Speculation, or other such untoward factors, defeating the Government's purpose.

* Between July 20, when the Blanket Code was promulgated, and November 8, 1933, over 100 separate codes were approved (Cp. *World Economic Survey* 1933-34, p. 36) Industrial conflicts have not always been avoided but the retirement of Gen. Johnson—the N. R. A. administrator,—in October 1934, after a Textile Strike, gives reason to hope that Labour would have a fairer deal hereafter. Negotiations are in progress for the extension of the N.R. Act ,. but certain dicisions of the Supreme court, in may 1935, seem to have invalidated the whole system.

Though President Roosevelt has, apparently, the whole-hearted support of the bulk of the American people,—the mid-term elections of 1934 giving him the largest majority in both houses of the Congress,—it would be idle to deny that his plans are meeting with criticism, and even opposition. But though his Labour Codes may be set at nought by manufacturers like Henry Ford, or by workers, as in the recent Textile strike, it is not beyond the realms of possibility that the President may be obliged to go to the logical conclusion of his present policies ---**a complete nationalisation of the means of production, and distribution in the public interest.** The transition from a haphazard, unco-ordinated, anarchic, individualist organisation, to a planned economy, is, of course, not easy ---especially in a country with the traditions and ideals of the United States. In the absence of a revolution,---like the Russian or the German,---the process is bound to be slow. Often its aims may seem to be obscure, sometimes even appear to be abandoned.

The Currency Policy is yet uncertain, and the world watches in vain whether the U.S.A. would now stabilise the Dollar after devaluing it by over 40%, having nationalised the entire gold Reserves of the country. They follow a policy of purchasing gold at a fixed price,—helping to maintain the Franc,—and seek to rehabilitate Silver at a fairly high level in the hope of achieving Bimetallism by International Agreement. But even if America succeeds in that rather ambiguous objective, it may be doubted if the purchasing power of the vast masses of India and China will be really increased by that means.* So long as their available productive resources are not fully developed, or so long as their system of distributing the national income remains as it is, there can be no hope of mere currency manipulation helping those people out of their poverty. It is the recognition of that very fact which has led President Roosevelt and his advisers, in their own country, to pin their faith for a national recovery, not merely to currency manipulation, nor even to deliberately reduced production or stifled sources of national wealth. They have not yet abolished destitution, nor reduced unemployment. But

*Cp. A series of 5 Articles in the *Bombay Chronicle*, on "Wither Silver" appearing on may 24th, May 26th, May 31st and June 4th and 5th. The articles were, it may be stated with the permission of the Editor, written by the present writer.

they are reported, at the moment of writing, (December 20, 1934), to be planning vast projects of National Development, costing 1,05,000 million Dollars in 25 years, and absorbing perhaps the whole of the present unemployed population of the United States (about 10 million). But for the moment their efforts are still in an experimental stage.

But whatever the eventual outcome, the courage, foresight, and genuine sympathy and understanding of the real situation, in the authors of these policies, cannot be denied. The world needs a new social order ; and they in America have already begun a " New Deal. "*

Equally clear is the position of the American Government in the international depression. These measures and policies are mainly, even solely, inspired and dictated, primarily by domestic considerations and requirements. Their attitude in the World Economic Conference amply justifies this view, as the next chapter would show.

*As these pages are going through the Press, the entire system of National Recovery seems to be jeopardised by a decision of the Supreme Court (27th May, 1935) rendering invalid section 3 of the N. R. Act : and declaring unconstitutional the Farm Mortage Moratorium. What steps the President would take to meet this situation is not known ; but those who had pinned their hopes to the success of the Roosevelt Programme must be filled with grave apprehensions about World Recovery by this development, (1st June 1935).

LECTURE VII

PERIOD OF DEPRESSION : 1929-1934.

THE NATURE OF THE PROBLEM.

The present Depression in Industry and Agriculture, Finance and Commerce, is a world-wide phenomenon, from which hardly any country is exempt. The civilised countries of the world being now-a-days very closely connected and interdependent by the growing bonds of Trade and Finance, it is indeed, inevitable that such a profound phenomenon should not be localised and isolated; but be shared, in a greater or less degree, by all the leading commercial countries of the world, and be felt by every important people in their productive as well as distributive organisation.

To estimate properly the full significance of the causes of the present Depression, and to understand correctly its nature, it is necessary, *first*, to realise that the present phenomenon represents no real diminution of the productive capacity of mankind. Following the world war, and dislocation caused by it, the peoples of the world set themselves the task of reconstruction and recovery, in which they were, in turn, hindered and stimulated by the circumstances of the moment. With the abandonment of the war-time control of industry and trade, there were at first violent fluctuations in commodity-prices, leading to a considerable disorganisation and decline in production and trade. But if the War had brought about wastage and destruction of life and property, which needed to be made good, it had also left a legacy of a stimulus to invention, and a strong tendency to closer and more efficient organisation, which brought about a rapid revival in the productive organisation of the world. As the countries of the world most intimately concerned in this maladjustment came to re-establish their pre-War position; as the disturbed Currency system, Credit machinery, and Exchange organisation were rehabilitated; as the causes of bickerings were weakened by the settlement, even temporarily, of such thorny questions as that of the Reparations, a new effort was made by the world for addition to production and trade. And they succeeded in their endeavours

by about 1925, when the pre-War level was practically attained. As one of the League of Nations' publications, already referred to, remarks :—

" The per capita, as well as the total, production of the world was greater than in 1913, though not as much greater as it might have been if the steady pre-War increase of productivity had not been interrupted."

From and after 1925, the upward trend was maintained in the world at large, though in individual countries the curve was not rising uniformly. There were many factors which contributed to this progress, amongst which may be mentioned the return to the Gold Standard and the stabilisation of the Currency in the leading countries ; the introduction of a cheap Credit policy in the U. S. A; the settlement of the Franco-German Reparations question by the Dawes Plan ; the reorganisation and rationalisation of German industry, chiefly by means of foreign capital; and the conclusion of the Locarno Agreements.

By 1929, Europe had recovered her pre-War position in trade and industry, as has been shown in detail in the previous Lectures.

Since the peak of production and prosperity was reached in 1929, there has, no doubt, been a considerable fall, but the net effect of the fall is still not taking the world production below its normal pre-War level. If we take the average of production between the peak period in the post-War years 1925-29 as the basis of comparison, the following figures, though showing a decline, nevertheless bear out the comparative settlement : *

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*WORLD PRODUCTION OF VARIOUS CLASSES OF GOODS, WEIGHTED BY 1930 VALUES.

(Average Annual Production 1925 to 1929-100)

	1925	1929	1930	1931	1932	1933
Food Stuffs ..	97	103	104	102	104	103
Raw Materials ..	92	111	102	91	81	88
Industrial activity	92	111	98	87	77	86

The falling off seems to be the greatest in the heavy industries concerned with the production of capital goods, where the rise also was the greatest.* The distribution of this decline by regions, including as well as excluding the United Socialist Soviet Republics of Russia—where the intense drive for increasing production under the Five Years' Plans has occasioned no small degree of the world Depression—is still more instructive.

The general conclusion to be drawn from those figures is obvious. The decline is the greatest in the manufacturing countries, and in manufactures. The depression is thus an outcome of commercial and financial, as well as agricultural and industrial, causes. Says *The World Economic Survey*: —

> " The crisis which has paralysed international finance and credit, and bids fair to strangle international trade, has severely shaken manufacturing enterprise, including the production of mineral raw-materials. But agricultural production, the extention of which in recent years is one of the causes of disorganisation, does not decrease, though stocks accumulate. The farmer, faced with a reduction in his income, exerts

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The production of Investment and Consumption Goods in
(Average 1925-29 =100)

Quarter of Lowest Production			Lowest Investment goods	Indices Consumption goods	Indices—Investment goods (at I quarter 1934)	Consumption goods (at I quarter 1934)
France	II 1932	..	70	71	76	95
Germany	III 1932	..	40	83	65	101
Netherlands	III 1932	..	51	76	64	110
Poland	I 1933	..	49	56	59	80
Sweden	III 1932	..	73	93	103	117
Kingdom	III 1932	..	72	85	97	98
United States	III 1932	..	24	73	49	89

This table clearly shows that the Depression was at its worst in the 3rd quarter of 1932 in most countries, and that, from the lowest point attained when the Depression was at its worst, recovery has been fairly substantial by the first quarter of 1934, Industrial activity is still lagging behind, but the production of consumption goods has increased even over the 1924-29 level. And that, too, without reckoning the enormous output by the U.S.S.R.

every effort to increase his production in order to counteract the effect of lower prices."*

REAL NATURE OF THE CRISIS.

I have deliberately quoted a somewhat lengthy extract from the *World Economic Survey*, not only because it is of peculiar significance to us in India--an overwhelmingly agriculturist country,—but because it explains in brief the real nature of the present crisis. Mankind, in the aggregate, has not lost in recent years its productive capacity; nor suffered any diminution in the productive equip-

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* The world stocks of 13 important Primary Commodities have varied as follows:

(Base: Average of 1925-29=100)

	Wheat	Sugar	Coffee	Cotton	Natural Silk	Rubber	Petrol	Copper
1925	72	70	43	80	89	63	93	109
1929	150	129	149	103	116	129	114	94
1930	155	157	243	127	174	183	116	153
1931	167	209	159	151	193	230	107	167
1932	163,	230	284	161	193	262	100	206
1933	163	225	208	159	196	263	96	—
1934	166	225	—	155	247	279	94	191

	Lead	Zink	Tin	Silver	Tea	General Index
1925	41	56	117	74	98	76
1929	159	144	118	140	117	124
1930	311	356	169	172	126	158
1931	544	467	218	160	122	183
1932	730	448	219	197	118	194
1933	793	386	165	275	142	186
1934	790	350	79	341	137	180

Cp. *World Economic Survey* 1933-34 p. 122-23. The Table deals with one of the most obvious and immediate causes of the crisis and Depression,—the accumulation of stocks which constantly depress prices. The restriction on production, by destroying stocks, as they did with Coffee in Brazil, or by acquiring existing stocks by the state, as they did with cotton in the U.S. or are doing with wheat in France; or by ploughing down crops and restricting acreage as they do in the case of most agricultural commodities in the United States—does not really help to improve matters, as is but too clearly shown by this Table. The problem is a problem of juster distribution of wealth among all classes of citizens all over the world, rather than of reduced production. But the Nations of the world do not seem to have perceived the gravity of the issues at stake ever now.

ment. But for the breakdown or dislocation of the economic mechanism,—and particularly that of exchange,—on which our entire productive organisation depends all the world over,—except Russia,—the advances in human science and technology, recently achieved, would still continue to provide us with the same increment in the annual supply of material utilities that minister to the welfare of mankind.

The Depression, thus generated, is hastened and emphasised by the remedies sought to be applied, each in its own way, by the several countries affected, without any general plan or mutual co-ordination. The result has often been a stultification of the measures so devised in one country by the unwillingness of the other countries conjointly affected to co-operate, in the form, or at the moment, when alone such co-operation is effective. It is necessary to add, for a proper understanding of the phenomenon, that the disorganisation between production and exchange, the disequilibrium between demand and supply—which we collectively describe as Depression—is, in its essence, a phase of the socio-economic transition, silently taking place below the surface of events. Mankind is rapidly outgrowing the ideal of production for exchange, and of human life exclusively for self-gratification. Given this basis of the phenomenon, it is immaterial if its intensity or phases vary in the different regions, and with the different peoples coming within its grip.

TRUE NATURE OF PROBLEM

The problem, therefore, rightly viewed and understood, is a problem of re-casting and re-building our entire socio-economic fabric---not simply an essay in re-adjusting the cogs and wheels of a machine, which may temporarily be thrown out of gear.

INDICES OF THE DEPRESSION

I shall now return to the indices by which we measure and concretely express the degree of this Depression. According to the official and authoritative investigations all over the world, and chiefly by the League of Nations, we may consider the nature and degree of this Depression by means of :—

(*a*) Production statistics, by countries or regions, as well as by industries. In this may also be included the statistics of stocks of produce accumulating, and thereby intensifying the disequilibrium between demand and

supply; (*b*) Un-employment figures, affecting the same equation in the opposite direction, but with the same results; (*c*) Trade values, and (*d*) Price Index all over the world.

We have already dealt with Production Indices, and that relating to the accumulation of stocks, which we, therefore, need not recapitulate, beyond pointing out that though Production has suffered gravely owing to this prolonged Depression, it shows traces of some recovery in many countries.

The lag in production was always greater in Industry than in Agriculture, and so the recovery seems also to be greater in the former. In so far, however, as these indices relate to quantities, and not to prices, the picture of recovery given by them would be misleading, unless corrected by co-relation with prices.

(B) TRADE STATISTICS.

Another equally important and significant index of depression is provided by the International Trade Statistics. Taking these statistics with all the reserve that the compiler of the Review of World Trade requires, we nevertheless find the gold value of world trade steadily and progressively declining. In 1930, the total world trade was 19% lower than in 1929; in 1931, it was 28% lower than in 1930, or about 42% less than in 1929; while in the first half of 1932, it was 34% lower than in the corresponding period of 1931, or barely 38.7% of the 1929 level. In 1933 it was 35% of the trade of 1929, while in the 2nd quarter of 1934, it was in value 33.2%, and in quantum 76.6% of 1929* The following figures, giving the value of the imports and exports of 48 countries, and comprising over 90% of the total world trade, make the point much clearer.

		In Million of U. S. Dollars.		Percentage full compared to preceding year.	
		Imports	Exports		
1929	January to June	15976	14300	..	..
1929	July to December	12818	14762	..	..
1930	January to June	13937	12233	13%	14%
1930	July to December	12088	11083	24%	25%
1931	January to June	9988	8712	28%	29%
1931	July to December	8613	7897	28%	29%
1932	January to June	6552	5757	34%	34%

Compared to 1929, first half, the world imports and exports had fallen by 65% in 1933, in value.

* Cp. *World Economic Survey*, 1933-34, p. 323 & 187.

(C) PRICE INDEX

Taking gold prices only, the average fall from the peak of 1929 to the middle of 1932 has been worked out, by the Economic section of the League of Nations, at about 50%. But it was much greater in agricultural products than in those of manufacturing industry. Hence, for countries like India, which are predominantly agricultural, the fall in prices of their production was relatively much more sharp, and consequently the severity of the Depression felt by them is much greater. For, while the prices of their produce fell, much of their costs of production, fixed in money, as also overhead charges, like taxation, remained unaltered; and so absorbed a greater and greater proportion of the produce when the agriculturist was the least able to meet them.

Percentage change in Average Gold Export Prices.

Article	1929 to 1930	1930 to 1931	1929 to 1931
Rubber	.. 42	51	72
Wheat	.. 22	56	65
Maize	.. 40	40	63
Coffee	.. 43	29	60
Wool	.. 40	26	56
Cotton	27	38	54
Raw Silk	.. 30	28	50
Sugar	.. 20	25	39
Butter	19	21	35
Cotton Piecegoods	11	21	30 *

*The following comparative statement, compiled from the League of Nations Publication *on World Production and Prices* 1925-1933, will serve to explain the volume and nature of the Recovery that has taken place in the world Price-level. Percentage changes.

(Contd. on next page)

		Sterling Prices		Gold Prices	
		Lowest Point 1930-33 to Jan. 1934	Jan. 1929 to Jan. 1934	Lowest Point 1930-33 to Jan. 1934	Jan. 1929 to Jan. 1934
1	Tin	+125	+ 3	+ 72	—34
2	Wool	+131	—56	+160	—72
3	Rubber	+164	—56	+128	—72
4	Linseed Oil	+ 36	—29	+ 17	—54
5	Tea	+121	—14	+ 95	—45
6	Mutton	+ 55	—25	+ 45	—52
7	Petrol	+ 26	+11	+ 6	—28
8	Beef	+ 23	— 6	+ 15	—39
9	Jute	+ 14	—52	+ 8	—69
10	Cotton	+ 60	—40	+ 20	—32
11	Flour	+ 10	—41	— 1	—62
12	Timber	+ 20	— 5	+ 19	—39
13	Bacon	+ 73	— 2	+ 58	—37
14	Coal	+ 0	+ 1	+ 1	—35
15	Cement	+ 7	— 3	+ 0	—38
16	Pig Iron	+ 6	—12	+ 5	—44
17	Sugar	+ 7	—52	+ 4	—51
18	Hides	+ 27	—56	+ 10	—72
19	Wheat	+ 0	—10	— 3	—68
20	Petroleum	+ 0	—64	+ 0	—15
21	Silk	+ 4	—55	— 3	—77
22	Cocoanut Oil	+ 0	—24	— 5	—72
23	Rice	+ 0	—53	— 2	—69
24	Coffee	+ 0	—55	— 3	—71

Index number of Wholesale prices March 1929-100 March of:—

	1930	1931	1932	1933	1934
Germany ..	90.5	81.6	1.5	65.3	68.7
France ..	85.2	82.5	68.0	59.7	60·3
Italy ..	87.4	71.3	64.5	57.5	55·1
U.K. ..	88.7	75.6	71.6	69.6	74.3
U.S.A. ..	93.9	79.1	68.7	62.6	76.7
Canada ..	96.0	77.2	72.2	67.4	75.3
Argentine ..	97.4	88.8	91.0	86.4	97.4
China ..	106.9	121.1	112.1	102.9	92.8
India ..	87.4	69.9	65.7	57.3	61.5
Japan ..	86.6	70.0	70.1	78.4	78.2

The Sterling prices —or those in currency depreciated about 40%— show a slight recovery over the lowest point, though in most instances these continue to be below the 1929 level up to any where near 65% Prices in gold indicate a much smaller recovery, and the evidence of depression since 1929 is much more emphatic even upto 1934.

The abandonment of the Gold Standard by some countries, like the United Kingdom, seemed to arrest for a while the downward trend of prices in their local markets. But if we take into account the gold values of these depreciated currencies, the process is even in these countries maintained. The relief, if any, was purely local and short-lived. As other countries followed this easy gradient of inconvertible paper, and the new caste of Scientific Insolvents began to grow, the fictitious expression of the currency medium paled before the asserting force of the purchasing —power—parity of goods against goods; and so, since the beginning of 1932, the whole-sale price index began to fall even in those countries.

(D) UNEMPLOYED FIGURES.

The next considerable and suggestive indication of the Depression is found in the figures of the unemployed. These figures are available only for organised industries, and in highly industrialised countries, where they have official or authoritative sources of collecting those statistics. From the Table given in the foot-note * it will be evident how wide-spread this evil is, and how it affects the Purchasing-power of people, and, therefore, the Price-level.

CAUSES OF DEPRESSION

The causes of this Depression have varied in its several phases and aspects. For the sake of convenience in analysis, we may study them, however, under two main groups,

*National Unemployment Statistics from 1929-34. (in thousands) at end of March.

	1929	1930	1931	1932	1933	1934
Australia ..	39	63	114	120	109	92
Belgium ..	28	42	207	350	383	391
France ..	9	14	72	347	350	379
Germany ..	2,484	3,041	4,744	6,034	5599	2798
Italy ..	293	385	707	1053	1082	1057
Japan ..	—	352	397	474	424	382
New Zealand ..	3	3	38	45	51	44
Switzerland ..	9	21	61	103	113	91
U.K. ..	1204	1694	2666	2660	2821	2225
U.S.A. ..	—	3543	7098	10739	13689	10877

N.B. The world Index of Unemployment is given, in the *World Economic Survey* for 1933-34, p. 318 in June 1934 at 197 as against 304, in Jan.1933, the base being average of 1929=100. For the above table, Cp, Op, cit, p, 170

Economic and *Political.* These, in their turn, could be sub-divided into two groups each: *viz.* (*a*) the technical economic causes affecting the organisation, and operation of industry; and (*b*) the Financial causes relating to Credit and Currency, in group I; and the (*c*) Historical reasons and (*d*) Political complications, such as Tariff walls and Treaty re-alignments, in group II. Having considered these causes, we shall pass in brief review the consequences of each of these sets of influences, and attempt to assess their bearing upon the development of Depression. Finally, we shall examine particularly the significance of all these with reference to India, and try to understand the degree of the Depression in this country.

GROUP I.

Taking the first group of these causes, Economic, we find a most important aspect of it not sufficiently understood or emphasised in all the popular discussions of the Depression. This relates to the *wholesale reorganisation of Industry,* or rather the entire productive organisation, which we commonly call the Rationalisation of Industry. The term, however, is somewhat misleading, since the process indicated by it applies as much to Industry as to Agriculture. It includes, besides reconstruction and modernisation of old industry, the development of new industries, too. In this conception of the term, we have to consider, not only the creation of such new industries in the last decade or fifteen years, as the Cinema, and the Motor-Car; the Radio, Petrol and the Rayon manufacture; the oil-burning ship, revolutionising shipping and ship-building; the electrification of plant and equipment in manufacturing and transport industry, mining, and even cultivation of the earth; and the cold storage reconditioning altogether the marketing of the staple articles of world commerce. The teletype printing machine can serve printing presses from one centre hundreds of miles away, while the new automatic machinery in all the uptodate industry of the world have recast wholly the place of machine-labour in the modern economic society. As a Report on *Recent Economic Changes* in the United States summarises it *

3. " A distinction should be made between the disappearance of industries and their transformation, by the

* Op, Cit, Vol. 1 94-5.

introduction of modern methods. The Census reports show that few industries have disappeared, the list given in 1900 appearing for the most part in the census list of to-day. These industries, however, have in many cases been greatly changed internally by modern methods. Thus shoe-making and clothing manufacture still bear the same name, but they are really, in most respects, new industries.

Many industries that survive in the same form externally, such as ship-building, locomotive building and the machine trades in general, have grown in size and capacity. The product is often much larger. No limit has yet been reached, apparently, to the size of product.

On the other hand, the last quarter of a century has seen a great increase in new industries as the result of scientific discovery, and of mechanical development. These are illustrated by the Telephone, Radio, Automobile, Rayon, Refrigrators, Electric Welding, Chemical and Electrical industries. These are of more than passing importance, for many of them have grown into great enterprises, employing many thousands of men, and producing new products in most quantities that have found ready markets. These new enterprises really constitute the most remarkable and most important phase of modern industry, and their true economic significance probably holds the clue to our industrial and economic future."

Side by side with these changes in old manufacturing industries, and the growth of new industries, the most ancient industry in the world is being revolutionised before our eyes. Agriculture is an industry of slow turnover, conditioned even now by climate and geography far beyond the manufacturing industry. It has, moreover, social factors affecting it, like the laws of inheritance restricting the size of the unit of production, which render the introduction of economies relatively much more difficult than in manufacturing enterprize. The scattered character of the holdings, moreover, prevent concentrated effort, organisation, and education of the workers, standardisation and mass production in agriculture, unless a community first accomplishes a social revolution as in Russia. Nevertheless, the scientist and the mechanician have contributed their mite to the revolution in agriculture, which has taken place in the last 20 years. The intensive study of Plant Biology has led to the evolution of seeds even of staple crops, which may be sown in soils and climes that were

regarded only twenty years ago as inhospitable, *e.g.*, wheat in Canada, which has now become one of the greatest wheat-producers in the world. Every kind of crop and cultivation of importance in the world market has been carefully investigated into by the scientist. In consequence, the plant life has been strengthened, and its diseases and pests localised and counteracted. The result is an unprecedented growth in the volume and variety of agricultural products, at a steadily reducing unit cost of production. The mechanisation of agriculture, by the tractor, the harvestor and the combine, is, though not equally possible in every country, growing. The application of chemical fertilisers contributes towards the increase in output; while the provision of special credit facilities, coupled with the growing use of the co-operative principle, lightens the burdens and handicaps of the farmer so as to enable him more effectively to resist competition.

Side by side with these changes on the supply side or in the productive organisation, have taken place even more significant, though less noted, changes on the side of demand. As the American authority already quoted says: *

"Surveys of the use of food, manufactured goods, automobiles, and housing, reveal radical modifications in the habits of American consumption. Physiologically, per capita food requirements have declined, and are still tending to decline, especially in view of the quantities required for maintaining body heat and furnishing energy for work. With higher incomes per capita, a higher standard of wholesomeness, due to trade action and public inspection, a wider variety of foods available in all seasons and in all parts of the country, fuller knowledge of nutrition and a more wide-spread information on dietetics, there is reason to believe that the actual diets of to-day more nearly meet the physiological needs than has ever been true for the population as a whole. By and large, a smaller proportion of the family income is required, under present conditions, to a safer, better balanced, more varied, more appetising diet than formerly."

**Recent Economic Changes*—Vol. I. Ch. 1. Says the *World Economic Survey*, 1933-34, p. 174. "Standards of labour legislation have on the whole survived the impact of the severest depression ever known.

(Contd. on next page)

Add to these factors of changes in productive technique and economic organisation, two other categories of forces working from different ends to the same goal; and we get the most considerable explanation of the extent and intensity of the present crisis. On the one hand is the operation of the new Russian economic system, which is based upon and worked on principles radically opposed to those motivating the economic machinery in other countries.

This helped to maintain improvements in the aggregate demands of an industrialised community. In a very informative section, in the *Course and Phases of the World Economic Depression*, the compiler shows how substantially Demand for primary products and food stuffs has altered in the course of half a generation. The following figures, taken from that work, (p.22) are amply illustrative.

Home Consumption per head in the U. K. (lbs.)

	1913	1928		1913	1928
Butter	9.9	14.6	Beef	22.2	33.1
Margarine	3.7	2.7	Bacon & Ham	13.7	23.1
Cheese	5.5	7.3	Tea	6.7	9.2
Coffee	0.6	0.77	Tobacco	2.1	3.1
Eggs (number)	56	69	Beer (Gallons)	27.9	16.1
Dried fruit	4.8	6.1			

The American authority already quoted shows a decline in meat consumption between 1900 and 1927 as follows: (consumption per head lbs.)

	1900	1927
Beef ..	67.8	58.0
Veal..	3.5	7.4
Mutton	6.8	5.4
Pork	64.7	68.5
All meat	142.8	139.3
Lard	13.2	13.8
Meat and Lard ..	156.0	153.1

Food consumption is, of course, largely influenced by the age-distribution of population; and in a generation or community with a falling birth rate, the index of food consumption may vary considerably in contrast with a generation or community with a high birth-rate. Summing up, the American authority on this point already quoted, holds:—

"Physiologically, per capita food requirements have declined, and are still tending to decline, especially in respect to qualities required for maintaing body heat and furnishing energy for work."

Russia has abolished individual competition as the sole operating, directing, as well as controlling lever of her economic system; and substituted in its place common effort, under common control, for a pre-determined goal. To her, therefore, the laws of Demand and Supply, as enunciated in orthodox economics, have little significance, whether in her domestic market or in her foreign trade. She is re-organising her economic system rapidly, on the basis of production primarily for use rather than for exchange. Exchange in her system is not for gain but for getting rid of the unwarranted surplus, or rather for its exclusive appropriation by a small class for its own enjoyment. Dumping, therefore, is an inevitable corrollary of Russia's changed socio-economic organisation; and if dumping has to be, Russia sees no reason why she should not do it systematically and scientifically. The Russian factor, therefore, in the world Depression, is of the utmost significance; and we shall not solve it simply by ignoring Russia, or abusing her rulers.

Radically opposite to the Russian factor at the starting point, but converging on the same goal, are the economies in the general economic organisation, introduced under the stress of intense and international competition. The process of Standardisation and Mass production hails from the intensely individualist America, which results in such obvious economies in the expenses of production to the individual concern, that its promoters and proprietors inevitably neglect the reaction of those economies upon the community at large. To introduce one machine may mean to displace ten human units' work, whose consequent unemployment is not compensated even by the combined action of increased wages to the workers still in employment, and the reduction in sale price to the consumer at large. And when the increase in production and supply renders the margin of profit to the producer ever smaller, he resorts to those other phases of Rationalisation, which are comprised in the collective term Cartellisation. The combination of competing establishments in an industry; the concentration of connected industries into one gigantic Vertical Trust; the introduction of the producer's own selling agencies, in the shape of chain stores; the evolution of the Interlocking Directorate so as to co-ordinate the general policy and control the main levers of the economic system,--these are all intended to eliminate, or at least to minimise, competition, and safeguard the profits of the individualist capitalist producer.

But making every allowance for these gains due to Rationalisation, Standardisation, and Modernisation in industry, the fact remains that their resultant dislocation in social economy is not properly provided for in the profit-seeking individualist society. And it is, this unintended and unwelcome progeny of Economic Modernism is responsible for the dislocation of the machine, and the creation of Depression.

So far as India is concerned, the operation of this prime cause of Depression may be slow and unnoticeable; but its consequences as outlined above are undeniable. The creation of new industries, and the restoration or revival of the old is a programme hardly touched upon yet by the powers that be in this land. We have, no doubt, made our first steps in a policy of scientific protection to new and likely industries. But, long before European and American writers discovered the limits of intensive economic nationalism, the rulers of India had showed such prophetic vision, that they do not even now seem to perceive the legitimate margin, recognised even by European and American writers, for the building up of a country's economic system. Without anything like an industrial revival and increase in productivity, India has nevertheless come to suffer most intensely from the world Depression, which she had no direct hand in causing, simply because her nascent industry is ill-equipped and ill-organised to meet the fierce competition of its foreign rivals. And her agriculturist is even more exposed and undefended than her manufacturer. Depression, therefore, in the shape of falling prices and stagnating trade, came to India, more for

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The intensive application of modern scientific research to industry has resulted, according to evidence collected in America, in an increase of the net profit from 100 to 300 per cent. President Hoover, when Secretary of State, for Commerce, estimated the annual saving to American manufactures from simplified practice, based on the recommendations in a *Report on Waste in Industry*, at $600 million, while the total saving from all such economies have been estimated at 5,000 million dollars, from this movement alone. The economy resulting from the growth of standardisation of parts and material, so as to avoid the waste due to incompatibility; the standardisation of sizes, dimensions, and properties of manufactured products, has been estimated, by the American Engineering Standards Committee, to amount, in a single case of the American and Automobile Industry, to $750 million annually! The total saving to industry from the reclamation and reuse of the waste products is still more incalculable, though, in a single case of reclaimed rubber, the annual saving was estimated in America at over £20 million annually in 1925.

fiscal, financial and political reasons, than because of strictly economic necessity.

Let us, therefore, now consider the second category of these causes, *viz.*, those relating to the financing of trade and industry, and rooted in the currency and credit systems of the world in general, and of this country in particular. *

In the Financial group are causes, more spectacular, even though more superficial and temporary,--and impressive than those already considered. While the group of economic causes hitherto considered have occasioned depression, not because it was in the nature of these influences inevitably to bring about such disorganisation, but because the economic system and condition upon which they inpinged were not tuned to meeting and benefiting by this impact ;---the financial influences to be now considered were in their nature such as unavoidably to cause the dislocation. The economic factors of a new revolution in production reviewed hitherto cannot be dismissed as essentially an evil which must be avoided by mankind, but which rather must be sought and welcomed like a spirited horse, and tempered to the situation and conditions in existence, so as the most fully to reap their natural benefit. The financial circumstances on the other hand to be now reviewed will have to be condemned as blunders, arising, not from the inventive genius and creative imagination of man, but rather from his blinding passions of greed and envy and exploitation. The former are, at the worst, faults in organisation, which could be improved without wholesale condemnation ; the latter are errors of ignorance or incompetence, which must be condemned without benefit of appeal, if we would not repeat the miseries of the present Depression.

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* Cp., G. D. H. Cole. *Guide Through World Chaos*, p. 62.

" The case of a vast country, with huge and diversified resources and population, may indeed be very different. But even such a country, though it can push the ideal of self sufficiency very much further than the small nations of Europe without disaster to itself, finds impossible barriers set to its pursuit of economic materialism." Elsewhere in the same work, the writer mentions India, China, Russia and the United States, as amongst the countries of this category who can maintain the policy of self-sufficiency without harm much further than others. Prof. Cole has not, however, appreciated fully the Wealth and variety of resources in men and material of India or China, so that his belief about " impassable barriers " even in these countries must be taken with a pinch of salt.

After this generic contrast, let us enumerate the financial causes proper. These are all related to the falling price level in all countries affected by the Depression, and are themselves the outcome of; (1) the strain on the currency and credit systems of the world generated by the decline in prices; (2) the abandonment of the Gold Standard by several important commercial countries in consequence of this strain; and (3) the disorganisation of the international Exchanges arising out of the freezing up of the streams and currents of international payments.

The fall in prices due to the economic causes of the first category has already been reviewed as the result of a growing disparity between Demand and Supply, emphasised by the accumulation of stocks on the side of supply, and the loss of purchasing power on the side of demand. We cannot here view the same phenomenon in the light of purely financial circumstances, which, had they been suitably ordered and managed, would have minimised disequilibrium, if not avoided it altogether. For the prices of commodities are an expression in monetary form of their individual as well as relative values. There is nothing absolute and unchanging in the individual, and, much less, in the relative values, as expressed in terms of the common medium of exchange. They depend, no doubt; upon conditions of supply and demand, not only of each commodity exchanged, as well as of the totality of such exchanges; but also upon the corresponding supply and demand of the money material or money form itself. It is not impossible for a modern community, properly organised and fully alive to its own resources and requirements, to control and regulate the conditions of demand and supply in the commodities of exchange, even in those cases which are undergoing the most revolutionising influences in their production, or consumption, or both. Much more easy is it to control and regulate now-a-days the demand and supply of the media of exchange, which are practically monopolised in all modern communities by their governments. Hence, if only the authorities controlling the monetary system of each country were sufficiently alive to their responsibilities, and mindful of their obligations; they could easily deal with the changing circumstances of production and consumption of material utilities and services in their community.

The facts however are otherwise in the modern commercial world outside of Russia. So far as the process of production and consumption of material utilities is con-

cerned, they have not yet accepted the principle of conscious and deliberate control of this organisation for a preconceived purpose and to a predetermined goal. The entire economic system is thus at the mercy of the chaotic forces of unrestrained competition born of greed, and motived by the insatiate search for gain.

In the absence of any proper regulation, control or co-ordination of the entire economic machinery of any given community, the problem of a fairly stable-price level is needlessly complicated.

Hence when the crisis began to develop, there was no means to check it as from a common centre. The measures taken in the Annus Terribilis, as Mr. Toynbee in the *Survey of International affairs*, 1931, calls it, savoured of the *Sauve qui peut* to such a degree that talks of common counsel and concerted action were futile. Says this authority :—

" Indeed, in this historical drama of 1931 as in the Napoleonic drama interpreted by Thomas Hardy in the *Dynasts*, the psychological forces were the real actors in the stage, and the material forces, nations—and states and Governments, bankers and politicians, commodities and currencies,—were their creatures, which moved under the impulsion like manipulated marionettes, or like shadows thrown on a Screen."

We have already reviewed the decline in prices as it occurred after the first steps had been taken for reconstruction.

The fall was the first and most rapid in the case of securities.

The United States Index stood at 309 in September 1929, just before the crash, and fell to 207 in November 1929. It revived to 244 in April 1930, and fell sharply to 146 at the end of the year.

The British Index stood at 78 in August 1931, just before the suspension of the Gold Standard. After the Suspension, it rose to 92 in November 1931, and then dropped to 81 in December. *

* Op. G. D. H. Cole, Op. Cit. p. 81, also Cp. *World Enocomic Survey* 1931-32 pp. 61-67.

The breakdown of the International Credit System was essentially a psychological factor. But in its train came a horrible brood of bank failures, Stock Exchange crisis, departure from the Gold Standard, Exchange control, *et ad hoc genus omne*. As already observed, the seeds of the debacle are found in the sudden bursting of the boom bubble on the New York Stock Exchange in October 1929. It not only caused heavy and numerous bank failures in that country, but turned the tide of investment from east to west. The failure of the Stock Exchange boom caused a sudden, sharp fall in the prices of industrial securities, which reacted on other prices, forcing them downward for purely psychological reasons. Because prices fell, the expectation of return from stock exchange securities—from industry in general---declined in sympathy, with the result that the whole credit mechanism of America was endangered. American credit was strained, if not weakened. To support it and strengthen it, America recalled her capital invested in Germany, and other European countries, despite a veritable glut of surplus production within her own frontiers.

The reason for these panic orders to repatriate capital was the absence of any machinery to absorb, convert and utilise the surplus of production, which, in the ultimate analysis, is the real source of all capital, as capital for local purposes. Devices, like the instalment selling, so peculiar a feature of American Economic system, had stimulated trade at the expense of a channel to convert promptly and effectively the surplus of production unto capital ; and that, in its turn, to better and easier credit. Germany and other such debtors of America, having already locked up this capital in industry, were unable to part with it without a disproportionately heavy strain on other parts of their economic machinery. They had nevertheless to comply with the orders of their creditors,—by substituting other creditors in their place.

The root vice of the system was thus not cured, but only magnified. Instead of one country suffering a unit strain, two countries or more were exposed to a doubled strain for an indefinite period, all through 1930.*

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* Some idea of the world capital movements may be had from the subjoined table.

(Contd. on next page.)

The American bankers had already been nervous about British Credit ; and now they could show to the world their reasons for such nervousness. Unless Britain introduced almost impossible economies in her public expenditure, she would get no aid from America. Britain's assistance to Germany had only exasperated France, who had found her moves checkmated at every stage by Britain in 1931. Hence, in 1931 May-June, when Britain went on lending to Germany in support of the latter's credit and currency system, French influences succeeded in making a drain from Germany till Germany's ultimate gold reserve was reduced to the statutory minimum. 100 million gold marks worth of foreign exchange were withdrawn from Germany on a single day, July 6th ; while, between September 1930 and June 1931, no less than 4,000 million marks were so withdrawn. Germany seemed beaten to her knees, and France reigned supreme for the moment in the world of European finance.

The measures taken by the British National Government, immediately on its formation, were inadequate to maintain the pound on the gold basis, and so they decreed a departure from gold, suddenly on the night of September 20th. The accommodation granted by France and

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Movements of Capital (Million of Dollars)
Long and short Term.

Lending Countries Exports	1923	1924	1925	1926	1927	1928	1929	1930
U.S.A.	126	489	622	140	470	1036	233	547
Great Britain	700	380	261	—29	482	667	672	190
France ..	..	..	..	..	504	235	—20	—234
Canada ..	44	107	277	173	51	164	—87	—161
(N.B.—Minus sign shows imports of capital).								
Borrowing countries Imports	1923	1924	1925	1926	1927	1928	1929	1930
Germany ..	..	421	816	169	1090	1017	567	145
Austria	187	220	110	170	257	193	166	187
Argentina	32	170	..	31	134	131	38	..
	..	226	74	128	22	54	—25	..

N.B.—Minus sign shows export).

As the table shows the continued long and short term Capital movements, the real character of the change coming over Germany is not clearly shown in it (Cp. Cole. Op. cit. p. 90).

America was continued; but still the strain upon the British Exchanges continued. A 50% *ad valorem* tariff was clapped on in November, as the first step in rectifying the trade balance on certain articles of luxury imports; an intensive campaign for "Buy British Goods" was started for the same purpose; another 10% all round *ad valorem* duty was imposed on the bulk of the British imports with a very restricted free list. All these measures, though they aided the depressed British trade, failed to secure the objective of lifting the World Depression, or even correcting the British balance of trade.

The tale of Britain is the tale of other countries, except that, in these, action was on their habitual and traditional lines, while in Britain it was a radical departure from the known policy of that nation. And because it was a departure, it frustrated, neutralised, cancelled out as it were, the measures of other countries to prevent Depression from deepening.

Hence the financial causes of the Depression, which were originally instituted as remedies for a particular phase of the evil—the restriction of credit, the rise of discount rates, the abandonment of the gold standard, the control of Exchanges, the impedement to trade,—all operated as the world factors for making depression deeper.

The position in regard to inter-gov rnmental war debts and Reparations, under the several debt funding agreements of the debtors with their creditors, is shown, succinctly and admirably, in the following table taken from the Mr. G. D. H. Cole's *Guide through World Chaos*, (pp. 106-7).

1. War Debts Due to U. S. A.	(In million Dollars.) Total debt incurred	Total sum payable in annuities	Estimated value of total annuities at 4%	Percent of cancellation already made
Great Britain ..	4604	11106	788	17.7
France	4025	6848	1997	50.4
Italy	2042	2408	528	74.1
Belgium	418	728	25	46.1
II Due to Britain (£ Million)				
France	600	799	256	57.4
Italy	589	277	90	84.9
III, Reparations from Germany		(Million gold marks)		
	136,000 (As fixed in 1921)	113905 (under Young Plan)	42183	69.0

The real significance of the burden of these Debts is shown still better by the following analysis based on the same authority. If you bear in mind the changes in the price Index, the value of £.100 of debt, on the 1913 prices, was equivalent to £.33 in 1920 in Britain, £60 in 1924, £73 in 1929, and £95 in 1931. As the whole of this debt was incurred at a time when the British price-level was about 75% above that of 1913 (*i.e.*, between 1914-18), we may say that the real value received for every £100 of borrowing was about £60. As the prices in Britain at the end of 1931 were about the same as in 1913, the burden of debt in comparison to real value received may be said to have appreciated some 75%. There is, however, a cancellation granted to Britain of something like 17% under the Baldwin-Mellon agreement of 1923; so that the real increase in burden, at present sterling prices, is not much over 50%, without making any allowance for the increased period during which the payment may be made. To France and Italy much more liberal terms are granted, no doubt; but in consideration of Britain's productive capacity, the burden is by no means unreasonable or disproportionate, even on the assumption that in such matters we must consider, not the letter of the bond, but the capacity to bear the burden. But still they threaten not to bear it at all.

Now consider the situation from the American standpoint. America has lent all these sums actually in good value—with, of course, a war time profit; and she has made her own contribution, in men, money, and material, after she joined hostilities on her account. But of the latter, she not only makes no mention, but asks for no share from the iniquitous Reparations calls made upon a helpless Germany by a cynical Frenchman and an unscrupulous Welshman. America has never approved of the Versailles treaty; she has never derived any advantage from it. She cannot, therefore, be held even morally responsible for the evils that have grown from it, as Britain must be, since she has shared to the tune of 22% in the Reparations, and benefited to an incalculable extent—or had hoped to—from its indirect advantages in naval supremacy and commercial ascendancy. America simply seeks to recover, not the full face-value of the bond given to her, but a very considerable scaling down of her actual payment. Her Government has lent nearly 70% of this amount by borrowing a like sum at home. Her budget position is very much

imperilled because of this debt even to-day. She must tax her people and industry, and face a daily growing army of the unemployed, because of this unfortunate legacy of European insanity. When she made those liberal and even generous agreements, no condition was ever made that the amount then agreed upon would be paid to her, only if the European Debtors of her debtors paid the debt to their European creditors, namely Reparations. She can, therefore, see no reason why her just, and agreed, and very much reduced; claims should not be paid to her. Even so, she might have considered—she would even now consider, I believe,—any suggestion for reduction, or even, cancellation, if only the Europeans would not squander the benefits thus derived at the cost of America in their futile race for Armament, in their blind hatred of their neighbours.

If America would not remit her claims, nor reduce them, let her at least, says the British politician, reduce her tariff barriers, and receive the goods of Europe in payment of her claims. American industry has now, I believe, got nothing to fear from any European competition—except from a renovated Germany, or reconditioned Russia; and so she might well abandon the tariff barriers without much danger. Recent tariff legislation in that country has empowered the President to vary the tariff schedule on goods from particular countries under special treaties with the United States. But if America is to reduce her tariff walls, would she have any guarantee that the Europeans would do the same? If European countries persist in their own petty trade barriers and jealousies; if Britain manoeuvres a scheme of Imperial Preference and local protectionism; if the rest of the world go on in the mad war of tariff armaments, imperialism and exploitation of the weak by the strong, why should America take even what little risk there might be in exposing her markets, her industry and her labour to such competition?

Apart from tariff walls and subsidies in Europe, there is the old trick of monetary depreciation by deliberate Inflation. What guarantee has America that, if she opened her market to competition, a concealed handicap would not be placed upon her by this fruitful device of bankrupt Europe? She, therefore, asks for a fixed exchange, for a return to gold Standard—not merely verbal assurances, but effective guarantees, such as adequate gold reserves being

maintained in New York. * Europe has shown no willingness to offer those guarantees, and so the continuance of the Depression.

There is one, aspect, however, of these politico-economic causes of the present Depression, which I cannot pass over without a passing note. Russia of the Soviets is undoubtedly a political cause of the origin as well as intensity of the present Depression. But Russia of the Communists is a still more potent economic factor, to disturb and throw out of gear the orthodox economic system. Russia was the first to lead the way to a wholesale repudiation of her Tsarist Public Debts, without any pretence about the ability to pay. She was the first to bring about a scientific discredit and disuse of the orthodox and obsolete cash *nexus*, watering her currency so generously that it became a new deluge to drown and end a sinful world. She was the first, and is still unique, in abandoning the ideal of production for exchange, and the only one to recognise the need for the comprehensive planning of the economic system collectively on all fronts, with due regard to the means of production as well as the ways of consumption ; to introduce a definite, deliberate purpose in all her activities ; so that, provided she fulfills that purpose and carries out that plan to her own satisfaction, she is careless of the curses or compliments of the world at large. Hence it was that she decided to be industrialised on a large, intensive, standardised scale ; to mechanise her agriculture ; to Rationalise her credit system ; to humanise her social system. The first Five years' plan aimed at doubling production taken in the aggregate. It was completed in four and a quarter years ; and —bar a few criticisms about the quality of the new production, a few reservations about the minor incidents— she has succeeded wonderfully. Not even the bitterest bourgeois critic of Russia —prejudiced and purblind as he may be by the driving might of self-interest—dare question the success of the plan in the aggregate. Besides, even if he dared it, the facts coming home to him every day would render it impossible. Producing all she can, but not

* The American stand point seems to be slightly changed, in this regard, as shown at the World Economic Conference. Cp. below, last chapter. But the latest pronouncement of the British Chancellor of the Exchequer (December 22, 1934) goes for to suggest that the stabilisation of the World's Exchanges is a goal desired by all. The only difficulty is as to who should take the lead, and how to restore it.

primarily for exchange,—Russia is indifferent about the price she realises of her surplus produce. To her it is an absolute surplus, unwanted, and encumbersome, which may be disposed of for whatever it fetches. So she dumps, dumps scientifically and persistently, dumps her wheat and dumps her oil, dumps in every bourgeois market, protected or not, dumps to knock the bottom out of prices, and incidentally to show the utter futility of all the checks and balances, all the delicate parts of the complicated adjustments of the bourgeois economic systems before a determined attack. You may call Russian goods the product of slave labour ; but you will buy all the same when you find them one---half one---third one-tenth---as cheap as the corresponding product of far more of certainly sweated labour, even if you do not call the wages system of the capitalist world the most abject form of unredeemed slavery, prostitution, and degredation*. And so she goes on merrily, laughing like some modern Mephistopheles at the vain struggles, the futile assistance, the contemptible guards and shields of the cowering Dr. Frankenstein—the entire bourgeois society of Europe and Asia and America. In one way or another, she compels you to recognise her new ideals, the new purpose of living, the new meaning of life, casting off your old shibboleths of comparative cost and enlightened selfishness, to reach the safe haven at last of Socialism. With Russia thus acting the rather enigmatic fairy god mother, the child of Depression goes on ever growing, which will not be ended until we have radically altered the schemes of our social values, the ideals of our common life, the purpose of our human existence.†

It remains for me to review the reaction of all these causes upon India, to note the influence of her own peculiar circumstances and conditions, which have made her feel the Depression. In India there has not been that stimulus to production, that rationalisation of industry, mechanisation of agriculture, modernisation of the credit, and nationalisation---or at least the naturalisation—of the banking system, which appear to have caused, each in its own way, the world Depression in other countries. We had our own currency experiments, no doubt, in the post-war as in the

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* On the question of whether any labour in Soviet Russia could at all be called Slave Labour, see the very illuminating articles in the *Current History* of November 1932 to March 1933, by Sydney Webb.

† See the next Lecture on the Russian Experiment.

pre-war period. Those who rule our financial and currency destiny decreed, immediately the war was over, that the rupee shall be worth 2 shillings gold. The decree cost us 50 crores in hard cash and Reverse Councils, and brought us the only benefit of destroying at one blow all our exports surplus of something like 80 crores, and replaced it by an import surplus of a like amount in 1921. It was inevitable; for India was the only country whose government deliberately raised the exchange value of her currency when all others,---including the British---were crashing..

The only Indian essay in national reconstruction consisted of the Bombay Development project, costing us 30 crores, to provide orders at top prices to British manufacturers, and employment at fabulous salaries to the members of the British steel frame. As if that was not enough, we had a five years' Railway Expansion programme, voted in one lump sum of rupees 150 crores, for extending and expanding an enterprise of which all the raw materials and accessories must come from Britain. Next we had budget deficits, which have been covered by loans at 7%, when in the world money market the rate was three or four per cent, coupled with conversion terms which would automatically double the volume of the loan after ten years, and give $3\frac{1}{2}$% on that doubled volume,--which is called *Conversion* and an Economy. If that be not enough, there were services concessions and another go at currency reform, which again raised the exchange to the prejudice of Indian exporter and of the Indian producer.

Do you wonder then that India has a serious Depression? Do you still ask that the value of her trade has fallen to a third, though the quantity is not declining in anything like the same proportion. Take only the following facts. While our imports have fallen from the post—war average (1924-1925 to 1928-29) of rupees 251.92 crores to rupees 130.64 crores, or by 48 % our exports have fallen from 353.51 crores to rupees 151.29 crores for the same period or by 55%.*

*Cp. The annual Review of the Trade of India 1933-34, which amply confirms this tale. What little recovery has taken place is almost wholly on the side of Imports. The Export Trade of India is ruined by a needlessly high Rupee Exchange, and the Indian Producer's wealth is cut by more than half in the last five years, as shown by the Report on the Trade of India for 1933-34, simply because of the fall in prices of agricultural Produce.

India is possibly among the six or eight greatest consumers of foreign manufactures. But she cannot now buy them, because her policy in regard Currency and Credit, Taxation and Expenditure, renders it impossible, notwithstanding that she gives more and ever more of own produce for less and ever less of the foreign wares she needs. The authorities have, for the last two or three years, been blaming the country's political awakening for the deepening Depression. But it is a most remarkable thing that, though not a single spark of the most definite form of that awakening has ever fallen upon the field of Indian Exports, that field seems to have suffered much more considerably than Imports. How would you explain this paradox, if you do not accept the analysis I have given above?

Let us now consider the remedies attempted to relieve the situation. The doctors, appointed to diagnose the malady, have noted the complication caused by the existence of intergovernmental Debts and Reparations. They have accordingly agreed, at the Lausanne Conference, June 1932, to cancel such Debts, subject to America, the universal creditor---agreeing to the same process. But the United States, not being a party to the Lausanne Pact, refused to waive her own claims, and to make her citizens bear the burden of the European follies and jealousies. The impossibility of making payment of the December 1932 instalment was emphasised by Britain before the due date, as well as after the payment had been made.† France was more logical and realistic; she refused to make payment, and so was instrumental, even though indirectly, in hastening the crisis in the United States. With their own experience of a first rate Depression fresh in their minds, the United States authorities were quite willing to hold a World Economic Conference to see if a concerted solution of common ills could be had.

The Conference was agreed to be held in London in June 1933. Meanwhile a commission of International Experts had been considering the specific ills to be remedied

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† Britain made a payment in silver at 50 c. per oz. in June 1933, and a token payment in December 1933, but refused any payment in 1934. American has retorted by holding under a special law passed for the purpose, all those who refused to pay their debt, as defaulters, being debarred from raising any loans in America.

by the Conference; and the following summary of the problems before the Conference is taken from their Report.

The Experts were convinced that "a full and durable recovery" would not be effected unless the conflict of national with international interests was avoided. They added.

"In essence the necessary programme is one of economic disarmament. In the movement towards economic reconciliation, the armistice was signed at Lausanne, the London Conference must draw the Treaty of Peace. Failure in this critical undertaking threatens a world wide adoption of ideals of national self—sufficiency, which cut unmistakably athwart the lines of economic development.

Such a choice would shake the whole system of international finance to its foundations, standards of living would be lowered, and the social system as we know it could hardly survive. These developments, if they occur, will be the result, not of any inevitable natural law, but of the failure of human will and intelligence to devise the necessary guarantees of political and economic international order. The responsibility of governments is clear and inescapable."*

I. MONETARY AND CREDIT POLICY

The Lausanne Conference laid special emphasis on the necessity of restoring currencies to a healthy basis. In this connection, it may be added, the restoration of a satisfactory international monetary standard is clearly of primary importance. The world conference, in the absence to evolve a formula which would be universally acceptable, had to consider how the conditions for a successful restoration of a free Gold Standard could be fulfilled. The restoration of equilibrium between prices and costs, and, in future, such a reasonable degree of stability of prices as the world measure of value should properly possess, are regarded as essential.

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*The Experts, it must be remembered, had not considered the situation and suggested remedies, before the crisis came to a head in the U. S. A. and so a good many of their suggestions seem unworkable under altered conditions. We reproduce their suggestions, however, as they serve to light up the main problem.

The time when it will be possible for a particular country to return to the gold standard, and the exchange parity at which such a return can safely be made, must necessarily depend on the conditions in that country, as well as those abroad.

1. Conditions under which a restoration of a free International Gold Standard could be possible.

(*a*) The solution of major outstanding political problems, without which countries who have departed from gold would hesitate to return to it.

(*b*) A satisfactory reserve for countries whose reserves have been depleted, *e.g.*, by

(*i.*) A settlement of inter-Governmental Debts.

(*ii.*) A return to a reasonable degree of freedom in the movement of goods and services.

(*iii.*) A return to freedom in the foreign exchange markets and in the movement of capital.

(*c*) A general understanding about measures to ensure a better working of the gold standard in the future, to assure each country concerned that, as long as it pursues a sound monetary and economic policy, it will be in a position to acquire and maintain the necessary reserves.

(*d*) Each individual country to support such international action by steps to achieve internal equilibrium in the following matters.

(*i.*) Revenue and expenditure, not only of the State Budget proper, but also of the budgets of public enterprises (railways, etc.) and of local authorities, should be balanced.

(*ii.*) Creation and maintenance of healthy conditions in the international money and capital market, and avoidance of any inflationary increase of the note circulation in order to meet Government deficits.

(*iii.*) Flexibility in the national economy without which an international monetary standard, however improved, cannot function properly.

CURRENCY POLICY.

The re-establishment of a free Gold Standard in certain "key" countries would, the Experts recognised, influence action in a number of other countries. The Experts were, of course, aware of the difficulties of countries who had departed from the Gold Standard in returning to it ; as also of the inadvisability of a premature and hasty return.

They suggested accordingly, that

(*a*) countries with a free Gold Standard and with abundant monetary reserves:

(*i.*) Should pursue a liberal credit policy, characterised by low money rates in the short-term market, and a reduction of long term rates by conversions and other operations as far as feasible.

(*ii.*) As far as market conditions and Central Bank statutes permit, should maintain an open market policy, designed to provide a plentiful supply of credit.

(*iii.*) Should allow gold to flow out freely.

(*iv.*) Should permit the greatest freedom possible to outward capital movements to facilitate sound foreign investments.

(*b*) In countries which have left the Gold Standard.

(*i.*) Efforts should be made to avoid a competition between States to acquire a temporary advantage in international trade, by depreciating the external value of their currency

below such a point as is required to re-establish internal equilibrium. *

(*ii.*) Under present conditions, exchange rates are liable to be constantly disturbed by speculative movements. In a period prior to the adoption of a new parity, it is advisable for the authorities regulating the currencies concerned to smooth out, so far as their resources permit, day to day fluctuations in the exchanges due to speculative influences by buying and selling foreign currencies.

(*c*) Countries which have introduced Exchange Restrictions, whether they have abandoned the gold standard or not :

(*i.*) Should totally abolish these restrictions as early as possible ; or they should be relaxed or abolished in the first instance as applied to foreign trade, even though it may be necessary to maintain them for a time with regard to capital movements.

[*ii.*) Such relaxation may in certain cases, where the external value of the currency has depreciated, necessitate the abandonment of existing parities.

In such cases it would seem particularly valuable to maintain a close relationship between these countries, the Financial Organisation of the League, and the B.I.S., in order to devise and apply the appropriate policy in each case.

In the case of certain countries, which are heavily indebted abroad, more especially on short-term, *e.g.*, Germany, a solution of the debt problem is necessary before their Governments will be in a position to modify existing monetary policy.†

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* Even the Experts did not seem to perceive that the very principle of unilateral depreciation of a country's currency ought to be deprecated. To suggest, even by implication, that this is a permissible device under given conditions is to strike at the root of the entire system of International credit and so of international trade, in a world of commerce

†The total gross foreign indebtedness of Germany was estimated in September 1932 at $ 4670 million, out of a total debt and direct invest-

(Contd. on next page)

3. FUNCTIONING OF THE GOLD STANDARD.

It is important that any declarations in favour of the restoration of an International Gold Standard would at the same time indicate certain essential principles for its proper functioning under modern conditions, without interfering with the freedom of action and the responsibility of Central Banks in determining monetary policy. The Experts suggested, as regards

(*a*) the Relation between political authorities and Central Bank, the monetary organisation be so arranged as to make Central Banks independent of political influence. Also, Governments, in their economic and financial policy, should avoid increasing the difficulties of Central Banks in the discharge of their responsibility.

(*b*) Monetary Reserves :

The modern tendency is to concentrate gold in Central Banks. Before the war more than 40 per cent. of the total monetary gold stocks consisted of gold in circulation or with private banks, while at the present time only 9% represents gold not in the hands of Central Banks. This development is welcome, as it tends to enhance the power and freedom of action of Central Banks. Gold reserves are now primarily required to meet external demands for payments caused by some disequilibrium on the foreign account. At the same time it must be recognised that recent legislation in many countries had rendered much gold unavailable for international use. The experts believed

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ment of \$5060— or nearly 80 % Germany is frankly unable to pay this debt, and in 1934 (June 14) she even declared her inability to make any payment on all debts, including guaranteed Loans in connections with the Young and Dawes Plans. Negotiations have opened (after reprisals threatened by Britain) to permit payments on these accounts, but though some agreement seems to have been arrived at between Germany and one or the other creditors countries, the whole problem is causing the gravest complication. Even ordinary trade debts are in jeopardy, and so trade with Germany suffers an inevitable paralysis. The threat of Germany becoming self-sufficient, by strictly rationing imports or developing her own synthetic raw materials and food stuffs, by a policy of intensive subsidies, is not quite a meaningless bluff ; but even if Germany carries out all she threatens, she is unlikely by such means to rehabilitate her national economy. (cp. *World Economic Survey*, 1933-34 pp.305 *et seq*) According to this authority. The total foreign Debt of Germany was reduced, between February and September 1933, by R.M. 4126 millions, but R.M. 3173 million of this reduction was due to the depreciation of the Dollar and sterling in terms of the Germany marks.

the following steps can be taken---without in any way diminishing public confidence—in order to permit more effective use of the reserves of Central Banks.

i. Lowering of cover ratios.

A great advance would be made if legal minimum requirements of gold (or of gold and foreign exchange) were substantially lowered below the customary 33% or 40% ratio, and the provision made more elastic. The margin available for payments abroad, representing the difference between the actual holdings and the legal minimum, would then be considerably greater. But this change must not be taken by countries with limited resources as an excuse for the building up of a larger superstructure of notes and credits.

ii. The Gold Exchange Standard.

In addition to those countries which allow foreign exchange to be included in their legal Reserve requirements, Central Banks in nearly all countries supplement their gold holdings with foreign short-term assets, in order to be able to influence the exchange more directly and more speedily than by gold exports.

The experts were of the opinion that this system of holding foreign exchange balances, if properly controlled, might hasten the return of many countries to an international standard, and might form an essential feature in the permanent financial arrangements of the countries which have no highly developed capital markets. These foreign exchange holdings in Central Banks should be invested with or through the Central Bank of the country concerned, or with the Bank for International settlement.

iii. Other Methods of Economising Gold.

In countries where Bank-Notes of small denominations are in circulation, these small notes might be withdrawn and replaced within proper limits by subsidiary coin, which would reduce somewhat the strain on Gold Reserves.

Improvements in clearing House Mechanism are also suggested.

iv. Distribution of Monetary Reserves.

The present abnormal gold situation, with nearly eighty per cent. of the world's monetary gold concentrated in five countries, cannot be explained by any single factor. It is a sign of the profound disequilibrium now prevailing in international economics.* The Experts therefore, recommended for countries with deficient reserves, in returning to the gold standard, to fix the new parities so as to be consistent with a favourable balance of payments, and so attract an adequate reserve without undue effort.

(*d*) Co-operation of Central Banks in Credit Policy.

While the responsibility of each one of them for the measures taken on their own markets must be left unimpaired, continuous consultations between the Central Banks of all countries should help to co-ordinate the policy pursued in the various centres, and may indeed enable the intervention of an individual Bank to become more effective if supported from abroad.

The B. I. S. represents a new agency for Central Banks, and should be able to play an increasingly important part, not only by improving contact, but also as an instrument for common action.

4. SILVER.

After keeping relatively stable from 1921 to 1929, the price of Silver in Gold currencies fell abruptly by more than one half in less than three years. This sudden decline must in the main be attributed to the same causes as have acted on the general level of prices. Some special factors, like the demonetisation of silver, the reduction of the silver content of token coins, and the disposal of surplus stocks, might also account for a part of this decline.

The Experts recommended, apropos of suggestions for Bimetallism, that a Bimetallic Standard, which presupposes a fixed relation between the value of Gold and Silver, could be safely introduced only if the most important countries of the world agreed to such a measure. As

* France and the United States now hold between them over $8000 million (of 1.50463 grammes of fine Gold) out of a total of under $ 11000 million in the world as a whole (Cp. *World Economic Survey*, 1933-34 p. 274)

the only international monetary standard, which is at present likely to command universal acceptance, is the gold standard, the idea of introducing Bimetallism must be regarded as impracticable.*

2. It has been proposed that Banks of issue should be allowed to hold increased quantities of Silver in their legal reserves. On the assumption that no form of Bimetallism will prove acceptable, the Experts thought Silver unsuitable for extensive inclusion in the metallic reserves of a Central Bank.

3. Governmental action should be taken for the purpose of improving the price of Silver. †

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*The determined attempt of the United States to rehabilitate silver by authorising the Treasury to buy all silver at a price of 50 c. per fine ounce (new devalued Dollar), and to maintain in the National Currency reserve a 1.3 proportion between Silver and Gold, has led to a considerable appreciation of the Price of Silver. If America is to introduce in her Reserves Silver upto the proportion named, she would have still to buy another 1000 million ounces, in addition to that which she has already bought. This may not absorb all the available Silver in the World, since China and India between them could easily supply this quantity, let alone the yearly production in the United States, Mexico and other Silver producers in the world. But even granting that America can and does absorb all the surplus Silver of the world, it does not follow that the object of raising prices in Silver—using countries, and in the world at large, would be achieved by this means. That is a problem of raising the purchasing power of the Indian and Chinese people, of recasting their whole economic system, and particularly the distribution of their national wealth among the people, which no foreign nation can accomplish. Besides, even when and if the United States does absorb the whole available Silver surplus, there is no guarantee that she would by that means maintain an International Bimetallic Standard. The whole problem is too complicated to admit of single, simple remedies like this.

† The results of the World Economic Conference of June 1933 are summarised in an appendix to this Lecture.

I. APPENDIX TO LECTURE VII.

CONFERENCE RESULTS.

The Conference, when it met in London in June 1933, considered the whole of this group of suggestions, as well as in parts ; but no useful result could be attained, nor general agreement could be arrived at. By the time the Conference met the Dollar had already fallen ; and, in addition, the American President had obtained authority from the Congress to receive payment in silver at 50 cents. per ounce as also to receive payment on account. The British Government took advantage of all these concessions in their June payment of their American Debt, but expressly declared that payment to be the last under the old agreement. Reference to this problem of inter-governmental Debts on the first day of the Economic Conference was as ill-judged a demarche as it was ominous, and the consequences of that step immediately manifested themselves in the impracticability of any agreement on the main currency issue. Though before she herself went off the Gold Standard, America was an ardent champion of an immediate return to Gold, at the Conference the United States Delegation took up an attitude of unintelligible hostility to the suggestion of the Gold Block to require an early return to the fixed gold exchanges. The latter were perfectly willing that the return might be made, by those countries which had departed from gold, at such time and at such parity, as each country's local conditions demanded ; but they were uncompromising in their emphasis upon the general principle of fixed exchange. The United States Delegation could not say what was the just exchange value of the Dollar, under the altered condition of world production and trade.* Moreover America had in the meantime noted the advantage derived by Britain from a depreciated exchange ; and she was unwilling to forego such advantage in bargaining as she might derive by keeping her Dollar free from the gold handicap. The restoration of the price level, again, was one thing, if considered from a local or national standpoint for a country like the United States; but a totally different thing, if looked at from a world point of view. The unbending opposition, therefore, of the American Delegation rendered agreement impossible on this most crucial question before the Conference ; and nothing has yet (end of 1934) been done to remove this great revival of international commerce.

* Foot note on the next page,

The only item salvaged from this disastrous shipwreck of the Conference was in regard to Silver. An agreement has been arrived at between the Delegates of the silver-producing or silver-holding and consuming countries, whereby the sales of silver are to be restricted for the next five years; and the price of the metal is intended to be raised by that means.* The agreement cannot, however, be said to have yet attained its ultimate objective.

II. PRICES.

The next item in the Experts proposed agenda for the conference was:—

1. Disequilibrium between Prices and Costs has created difficulties which must somehow be overcome in order to make progress in the monetary and economic field possible.

In the first place the burden of Debts has increased considerably in terms of real wealth, and made it more and more difficult for debtors to discharge their obligations, and avoid a breach of contract. With regard to International Debts, there is the added difficulty of the Transfer problem.

Secondly, as a rule costs fall more slowly than prices, making enterprises unremunerative. This causes disorganisation and reduction of production, and an increase of unemployment. The reduction in earnings in its turn. diminishes the purchasing-power in the hands of the public. Moreover, a restriction of sales makes further sound extension—or even the upkeep—of industrial plant seem unnecessary, and arrest activity with regard to new investments.

Thirdly, the decline in prices has not proceeded at the same pace for all classes of commodities, manufactured articles falling more slowly than natural products, and retail prices falling less slowly than wholesale.

The decline in production, superimposed on the decline in prices, has reduced the national money incomes of

* President Roosevelt declared he wanted a Dollar which would be substantially the same in purchasing power 10 years hence as to-day. But what would be that value of the Dollar, under conditions of free international commerce, as also under the new and growing ideal of national self-sufficiency, no one could say.

some of the largest countries in the world to less than 60% of what they were three years ago.* In countries which depend for their export on primary products, the gold prices of these products had in many cases fallen to a third, a quarter, or even less, of the former price, which had its disastrous effects on the position of these countries, particularly in respect of their international balance of payments, by substantially increasing the burden of their external liabilities. In many countries budgetary difficulties had arisen, particularly owing to grants for Unemployment benefit and other social purposes while revenues were falling.

2. Methods of restoring equilibrium:

* The following figures represent the wealth of the United States, the wealthiest country in the world, and of 5 other countries in their national currencies (*World Economic Survey*, 1933-34.)

Countries		1929	1930	1931	1932	1933
U.S.A.	$	83,000	70500	54700	38300	39800
U.K.	£	3996	3938	3499	3380	..
Germany	Rm.	76100	70200	57100	46500	47500
France	Fr.	245000	243000	228000	206000	..
Japan	Yen	11,919	10417	9421	9813	11,101
Australia	£	556	459	430	..	..
New Zealand	£N.Z.	142	117	100	101	..

Since 1933, there has been an improvement both in the U.K. and in the U.S.A., though their local currencies have been considerably depreciated, over 40 per cent. of their pre-depression gold parity. In India according to the *Review of the Trade of India*, 1933-34, the value of the Principal Crops in the most important Provinces declined, between 1928-29 and 1932-33, as follows: (in lakhs of Rupees)

PROVINCES		1928-29	1932-33	Percentage Decline
Madras ..	..	1,8078,	99,33	45.0
Bombay ..	..	1,2052	83,86	30.4
Bengal ..	..	2,32,59	90.54	61.1
United Provinces	..	1,40,52	91,01	35.2
Punjab ..	..	76,78	48.53	36.8
Burma ..	..	63,38	29.45	53.5
Bihar & Orissa	..	135.17	56.55	58.2
Central Provinces	..	68,77	35.40	48.5
Total	..	10,18,51	5,34,67	45.5

In India, it may be added, there has been no rise in prices even in terms of the local currency, thanks to the Rupee being linked with Sterling.

(*a*) Obviously, one method of restoring the lost equilibrium between Costs and Prices is to reduce costs. As a rule this is not possible without reducing money rates of wages. Some reductions in wages have recently been effected, in certain countries to the extent of something like 20% 25%.* But such reductions differ from one country to another, and each further substantial reduction meets with increased resistance. That expedient, therefore, cannot be relied upon to correct the world wide Depression.

(*b*) Equilibrium may also be restored by a rise in prices.

(*i*) by limiting supply. The U. S. A. has practised this device most emphatically,—as noted in the preceding chapter; but the results, though noteworthy, cannot be said to be over encouraging.

(*ii*) A liberal credit policy, including low short term interest rates. This is the chief device in Britain, and has helped that country effectively to secure a Budget equilibrium; but we cannot say that it has completely lifted Depression from British Trade or Industry.

(*iii*) In order that a liberal credit policy may have the desired effect on prices, it is necessary that a demand for credit should rise.

(*iv*) Finally, a recovery of sound international lending, which would put purchasing power into the hands of countries with a limited supply of domestic capital, would have a helpful effect on prices. But even if, by such means, the collective purchasing power of a community is raised, so long as the distribution of its national wealth remains unaltered, there can be no hope of a real increase in the purchasing power of the people. †

* See pp. 161 et seq. of the *World Economic Survey*, 1933-34, for the Index Numbers of decline in wages, both real and nominal. In Real Wages, there appears a general rise, while in nominal wages there is a noticeable decline. The decline is the greatest in Agricultural wages in U.S.A.—about 50% between 1929 and 1934 March.

† Says the *World Economic Survey* for 1933-34, p. 303 :

(Contd. on next page)

Nothing tangible, however, could be achieved in the Conference on this group of problems. Each country concerned pursues its own credit policy; and some conversions of long term public loans have been made at lower interest. In private credit, likewise, reduction in Interest has been effected, in individual countries, by legislation, as in America, or executive decree, as in Germany, or mutual agreement, as in almost every enterprise of standing.* But these measures have not yet been translated into such an improvement in the community's purchasing power as would help to raise general prices. Even the deliberate Depreciation of the local currencies has not

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"The reasons for this almost complete paralysis of international long-term capital movements are fairly clear. In the present disturbed international situation, when political difficulties are aggravated by economic uncertainty, there is little prospect of renewed foreign lending. In addition to the fear of further currency instability, the influence of national economic policies, such as those affecting taxation, tariffs and quota systems, and the decline of international trade, with the ensuing transfer difficulties, make foreign loans exceptionally risky, while few debtor countries are in a position to add to their already heavy commitments new loans at interest rates which must incorporate risk premiums".

* "Apart from conversions, the reduction of debt charges by bankruptcy default, interest reductions, compositions, repayments, suspensions of interest or amortisations, and purchases of outstanding securities has been proceeding in most countries; but it is impossible to generalise concerning the adequacy of the reduction so far made. It is obviously necessary to reduce existing debt charges to the point where profits emerge once again if new investment is to take place. On the other hand, the possibility of profits being earned is dependent, *inter alia*, upon the general level of Prices, and in many countries—in all which reflact rather than determine world conditions—a rise in prices may precede a renewal of investment."

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"In many countries, arrangements have been made by which industrial enterprises have been able to free themselves of some portion of their fixed charges giving shares in return. A notable example is provided by the reorganisation of the Chilean Nitrate Company,—Cosach—where indebtedness amounting to $232 million has been reduced to $52 million by the issue to creditors of "income bonds," interest on which is payable from profit. In Germany, during 1933 frozen debts have in many cases been turned into equity shares." Cp. Op. cit. p. 295

In India the most considerable instances of such reductions of Debenture Interest are those in regard to the Tata Hydro Debentures—interest reduced from 8% to 6% and a bonus paid to the Debenture holder at the time of the reduction; and that of the Bombay Telephone Company Debentures, Interest reduced from 6% to 4½%.

achieved this result, in any considerable degree, or in an abiding manner.

RESUMPTION OF THE MOVEMENT CAPITAL.

A return to a normal situation will be dependent, *inter alia,* on a resumption of international capital movements. Apart from the instability of Exchanges, which we have dealt with above, some of the major obstacles to capital movements are : the control of foreign exchanges ; and, in certain cases, the existing burden of debts.

1. Abolition of Foreign Exchange Restrictions:

The adverse balance of accounts in many countries,—aggravated by the drop in prices and the falling-off in foreign trade,—has obliged those countries, when they could no longer re-establish equilibrium by means of foreign credits, to choose between abandoning the stability of their currency, or instituting exchange control as an artificial means of balancing imports and exports. Certain countries have even adopted both systems simultaneously. The majority of the countries, which have recently suffered the disastrous consequences of unrestricted inflation, have opted for currency control. Such control has enabled them, to some extent, to prevent or limit exports of national capital and the withdrawal of foreign credits. Further, foreign currency control has frequently been adopted in order to improve the balance of payments, by refusing to pay in foreign currency for those imports which do not appear indispensable. But in the long run this reduction has not had the expected effect of improving the trade balance.

A return to normal conditions presupposes the disappearance of these restrictions, which is itself conditional in each of the countries concerned, on the permanent restoration of equilibrium in the balance of accounts.

2. Existing Indebtedness

After all these measures have been taken, permanent equilibrium in the balance of payments cannot be restored owing to the threat of mass withdrawls of short-term

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* Cp. *World Economic Survey,* 1933-34, pp. 134-156

deposits, or owing to the heavy charge resulting from the service of long-term debts. In that event, arrangements relating to foreign debts will have to be made between the parties concerned.

(*i*) Short-term Debts :

The present regulation of the short-term debts, particularly in Germany, by means of "standstill" agreements, exchange control, and transfer moratoria, is, in its very nature, only a temporary measure. A definitive and abiding solution must be found which would take into account the circumstances of each individual case. Certain countries have followed, in 1933-34 a policy of " unfreezing " the credits, which has no doubt had some salutary effect. Brazil and Argentine have made agreements with their creditors to unfreeze their blocked credits, which provide an excellent example of how the stream of capital movements can be made to flow once again.*

(*ii*) Long-term Debts :

In the case of those long-term debts, the burden of which has been so aggravated by the present level of prices as to be incompatible with the equilibrium of the balance of payments, agreements should be concluded between debtors and the bond-holders. But the process has its own difficulties and obstacles, and we cannot say that any real progress has yet been made.

3. Capital Movements:

The Experts thought a resumption of the movement of capital throughout the world should be effected through the normal credit channels. The creation of a special credit institution may promote this resumption.

To this end, the establishment of a Monetary Normalisation Fund, which was contemplated at the Stresa Conference, may be worth considering.

Another method of encouraging capital movements is a programme of public works on an international scale.

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* *Economic Survey* p. 306.

The Experts did not think it probable that public works could be internationally financed to any considerable extent. But the experiment of the United States in regard to the Tennesse Valley Project, and still later their Twenty years' plan, offer considerable impetus to this suggestion.

IV. RESTRICTIONS ON INTERNATIONAL TRADE.

Restrictions on international trade,---whether they take the form of prohibitions, or of quotas, or licences, have in recent years become exceptionally widespread and numerous. They constitute an insurmountable barrier to international exchanges, and nullify the advantages resulting from commercial treaties, which have become of increasing importance in the last two years. *

The abolition of these measures constitutes the most urgent problem from the point of view of bringing world economy back to a more normal condition.

V. TARIFF AND TREATY POLICY.

The tariff policy which has been followed by many countries in the past has been greatly aggravated in recent years. This tendency has contributed largely to the disorganisation of world conditions.

Positive action in this direction is assured important support. Countries compelled to dispose of a large pro-

* The Ottawa Agreements regarding preference to British Empire goods in the members of the British Commonwealth of Nations provide the best example of this type. They were concluded in November 1932, and are being followed by France so far as her colonial possessions and dependencies are concerned. These great units, organised so strongly within themselves, render the dangers of an economic World war not less, but more. Britain has also negotiated Commercial Treaties with European and American countries, which is a second line of action for the recovery of her own trade and industry. Thanks to her Empire Preference arrangements, she is in a specially advantageous position to negotiate excellent bargains for herself. But these Treaties and Preferences have not brought equal advantage to all parts of the Empire, and much less to India. Nor have they helped a general recovery of trade all over the world. The powers given to the American President to negotiate such Treaties makes an addition to the list of peoples pinning their faith to this mode of seeking relief from Depression. But as America is following a policy of self-sufficiency, if necessary, we cannot find this device operating on a large scale in her case.

portion of their products, whether agricultural or industrial, on the world markets, are most deeply interested in checking the increase of tariff barriers and in securing their reduction. An improvement in the world economic situation would be facilitated if the debtor countries were enabled to pay their debts by the export of goods and services, and if the creditor countries framed their economic policy in such a way as to maintain the capacity of debtor countries to pay by these means.

Any lowering of tariffs must, however, be effected in successive stages, and should, so far as possible, be simultaneous. No country can afford to adopt or maintain a really liberal tariff policy, if other countries persist in the opposite policy.

In this chapter of the Experts' suggestions, also, the Conference could achieve nothing worth recording. The interests of the more backward countries are much too deeply involved to permit them to agree to any relaxation of protection to their local industry. And even the more advanced countries are suffering from lack of foresight, moral courage, or *vis inertia*, so deeply as to be unable to make a move in the direction contrary to their traditional policy of Protectionism.

VI. ORGANISATION OF PRODUCTION AND TRADE.

A greater freedom of international trade is not considered by everybody to be the sole remedy for the present depression. It has revealed a profound disorganisation of production and distribution, which is not always easy to cure by each national unit acting on its own. Joint action by their Governments is necessary, if only to prevent the futility of modern, intensive, economic Nationalism. A real recovery of Production and Trade is not to be thought of, so long as the unequal distribution of the natural endowment of each community, and its human complement and material equipment are not considered from the standpoint of a wholly sociable and socialised world. Trade will be an engine of Imperialism, and production a means of local exploitation of the masses by the propertied classes so long as commerce rules the world, and profit seeking inspires the individual.

The desirability of inter-Governmental agreements in the case of wheat was advocated on these grounds, and has helped to maintain wheat prices since its conclusion.*

International agreements have also been contemplated in the case of certain commodities, the production and sale of which are controlled to a greater or less extent by certain Governments, particularly timber and coal.

The Experts also recommended the Conference to ascertain whether it would not be possible to conclude agreements with sea, land, or river transport, which might improve the economic condition of the transport system, while considerably reducing charges, which at present represent a heavy burden on the State budgets in the case of certain methods of transport.

In the case of shipping, the most urgent questions arise in connection with direct or indirect subsidies to national mercantile marines and premiums on national shipbuilding.† This policy has certainly contributed towards the creation and maintenance of a much greater tonnage than is required by existing international trade, so that in many

* Cp. *World Economic Survey* p. 323-24. Wheat farmers have been receiving Government subsides in Britain since 1933 in the shape of a guaranteed minimum of price. Sugar, bacon, poultry also receive similar treatment.

†Shipping Subsidies in some leading countries are shown in the *World Economic Survey* for 1933-34 (p. 219) as follows:

(Millions of National currency units)

Country	Currency	Subsidies to Regular lines 1913	Subsidies to Regular lines 1933	Subsidies to Tramps since 1931	Special grants to assist Scrapping since 1931
France ..	Franc	51.2	353.7	150.0	..
Germany ..	Rm.	7.1	20.0	..	12.0
Italy ..	Lira	19.2	263.2	48.8	..
Japan ..	Yen	11.5	12.3	..	11.0
Norway ..	Krone	2.0	6.0	..	..
U. K. ..	£	0.48	0.35	..	..
U. S. A. ..	$	1.1	23.1	..	..

Since 1934 the British Government is giving £ 2 million as subsidy to British Tramp Steamers.

countries shipping has become a burden on the national economy, instead of a contribution to its prosperity. It is, however, impossible to return to sound conditions in the shipping industry so long as the present conditions endure.

RESULTS ON VI.

Agreement has been reached,—but after the Conference was over,—between certain countries producing and exorting wheat, and others consuming it, to restrict the area sown as also the quantities exported, so as to permit of the present accumulated stocks being absorbed, and prices being thereby raised.

The situation thus remains still one of unrelieved gloom, except perhaps in the United States, where the local measures for National Recovery seem to be taking effect, or in Russia which stands on a wholly different footing.

LECTURE VIII.

THE RUSSIAN EXPERIMENT.

I propose, as I have already informed you, to devote this entire Lecture to the Russian Experiment in Economic Reorganisation. Not only because it is the greatest essay of its kind known to human history; it has radically affected our theories of economic action and human motives, social organisation and political intercourse. In a series of Lectures on Price-Movements in a given period, wherein this Experiment looms the largest single event, there is every justification to glance at it, because, in so far as the Experiment may fairly be said to have succeeded, it must be admitted to have revolutionised the very basis of the Capitalist Theory of Prices. I make, therefore, no further apology for introducing this subject, explaining to you the nature and extent of that Experiment, and pointing out the directions and the manner in which it has affected the accepted Price theories.

The Russian Experiment has its importance, even if it had not affected so radically the Theory of Prices, because, taken collectively, the effort to create a Communist Society, as exemplified in Russia, is now 17 years old. It affects 1-10th of the whole human race, and 1-6th of the entire earth surface. Both in regard to the human and the material resources, it is one of the most important units in the modern world; and the radical change in its basis and framework of social life cannot but have repurcussions in other parts of the globe. Imitators and admirers of Russia are not wanting in every modern country, which has the slightest pretension to be civilised. Whether or not they succeed in revolutionising their own society on the Russian model, their very presence indicates a menace to the existing order, which the champions of the latter have not hesitated to recognise and attempt to guard themselves against. If the Communist Economy, as given effect to in Soviet Russia, succeeds—in whatever form that success should come in each particular country—the entire conception of the science of economics will have to be revised. The face of the world, and the economic intercouse between its nations, will then be fundamentally altered.

In recorded history, there is no parallel to this colossal effort to revolutionise the basis and the fabric of such a

vast community—unless we think of the French Revolution of nearly 150 years ago. In point of numbers, and probably also in point of the area affected by its immediate incidence, that Revolution cannot compare to the present Russian Experiment. Nor can we speak of these two mighty events in human history in the same breath, in so far as the ultimate result is concerned. For, while the French Revolution finally ended in the rise of the Napoleonic Empire, after untold blood and treasure had been expended in the vain pursuit of "Glory," the Russian Revolution is still accomplishing itself on the original revolutionary impulse, and the classic lines outlined by the Apostles of Communism, after 17 years of its coming into existence in the land of its birth. The Communist Party in Russia seized the power and machinery of government, when it perceived the Tsarist regime had been weakened by internal corruption and shaken by reverses in a War abroad. Though the immediate successor of Tsarism was the Liberal regime of Kerensky, the latter was unable to withstand the determined onslaught of the Proletarian leaders, supported by open disaffection in the armed forces. It is an irony of history, seldom remarked, that Communism, which is professedly international, stood at this critical moment in Russian history, as the true Nationalist party; while the Radical Liberals, professedly nationalist, sought foreign aid to maintain their hold on the country. They failed, and the Bolsheviks, succeeding at once, set about giving effect to their ideals of Socialism.

Overcoming all internal opposition, and defeating all external enemies, the founders and leaders of the Communist Revolution in Russia have persisted in their effort, ever since the day they seized power on behalf of the Workers and Peasants of their country, and established a Dictatorship of the Proletariat. Like the French Revolution before them, which attempted to transform a class-ridden, hide-bound, feudal society into a democratic association of equals and brothers, free to pursue the aims then regarded as legitimate rights of the individual, the Soviet society seeks to transform the Capitalist world of the Tsarist Empire into a socialised, communist, classless and equal unit, with motives of common good in place of the incessant search for individual gain. A new scale of values has been created, and a new outlook on life and its purpose, a new philosophy of living and working, has been developed. These are reacting profoundly, not only on the Russian,

but on the social framework, and the principles governing it, in every country of the civilised world.

The Communist Party in Russia has had, indeed, no easy task, ever since the fateful day they seized hold of the reins of power, falling from the incompetent hands of the Kerensky Government. Except for a few determined minds, who knew the goal they were striving for, the rank and file of the Party were themselves not fully aware of the tremendous responsibility they had shouldered. Being carried to power on the crest of a surging wave of emotion and unrest, the new leaders had to declare measures and announce policies, which, for the moment at any rate, were valid on paper only.

For one thing, the capitalist States around Russia were by no means delighted at the fall of the Tsarist Regime, and the Kerensky government—particularly as the Revolutionary Government declined to admit responsibility for the Tsarist debts of Russia. The whole mass of vested interests in the most powerful nations of Europe and America was arrayed in hostility to the Bolshevic regime ; and subsidised Russian adventurers—like Kolchak, Denikin, or Wrangel—to embarrass and overthrow the new Government. When the Civil Wars thus fomented by foreign money and carried on by foreign troops were ended ; when the spectre of Famine and starvation had at last been laid, the Russian Soviet leaders discovered that their enthusiasm had somehow outrun their discretion. They had but imperfect knowledge of the realities of the situation they were faced with. There was an undoubted hostility between the Town and the Country, between Agriculture and Industry—which was likely to strike at the very root of the new Communist Economy. The peasants were grateful, indeed, to the Revolutionary Government, in so far as it had confiscated the vast lands belonging to the Court, the Nobility, and the Clergy of the Tsarist days, and had declared such lands to belong to the people. But the peasants interpreted such decrees of Government so as to make the Confiscated lands belong, not to the community collectively, but individually to themselves. They took over the lands belonging to the Nobles and the Church in their neighbourhood, and distributed it among themselves, in a manner that did not square with the Communist principles. Not only was private, individualist, ownership of land not abolished, by such redistribution amongst the peasants of a

given village or district; but the evil of capitalist farming by the richer peasants called *Kulaks* in Russia, and the possibilities of exploitation of one class by another, was by no means removed. And when the Party in power tried to checkmate them, by discrediting altogether the Money Economy by wholesale watering of the Currency and endless depreciation, the peasants retorted by withholding supplies from the Towns where alone the strength of the Communist Government lay.

The Towns, or the industrial proletariat, the mainstay of the new regime, were thus in a miserable plight. Cut off not only from their food supplies, but also from the sources of the raw-materials needed to prosecute such industry as existed in Russia at the time, the towns found a double difficulty in bearing the burden of the Revolution and Civil War on their own exclusive shoulders. Nor were they able to obtain from abroad what they could not obtain from the peasants in Russia itself. In the first place, they had little surplus produce to offer in exchange for the raw-materials and equipment they badly needed to restore and recondition Russian industry. In the Tsarist days, Russia was mainly an exporter of food stuffs and raw-materials, which were now not available because of disorganised production and the disaffection of the peasants.* And then there was the nationalisation of the Foreign Trade—one of the most stringent and relentless points in Communist administration. Non-socialised countries would not be willing to trade with a people, who had disowned liability for the debts of their predecessors in office; who were openly and avowedly destroying money economy in their land; and who were proclaiming the most bitter war against the very basis of private property and personal profit as the motive force of economic action. The harder the measures the Government adopted to make the peasants part with their supplies—which they did not themselves need for local consumption, the more determined became the latter not to surrender their advantage. They would rather slaughter cattle, than send meat to the city markets; for the simple reason that they would not get in exchange from the city what they considered to be a fair price for their goods. Money had no place in the early Russian Soviet economy—not even to facilitate exchange. Hence the peasants would rather store up, and allow to go

* Cp. *The Russian Experiment*, by the present writer

waste, all kinds of grain and other food-stuffs, than sell them to the towns is the only manner in which such sale could be effected in the Communist State. Trade, both domestic and foreign, was nationalised, and so the merchant had no chance to make a profit. In every way, therefore, the struggle between the Industrial Proletariat in the town,—a small minority—and the Peasantry, a huge, unwieldy, but jealous, superstitious, and ignorant mass, unable to understand the motives of the Government, or appreciate the task before them,—became bitter and prolonged.

The way out of this struggle was found, after a prolonged agony lasting for nearly four years (1917-1921) by the genius and daring of Lenin. He announced that New Economic Policy, which seemed to make the Communist Programme to recede, the more effectively to advance when the time for a thrust forward really came. Under this New Economic Policy, concessions were made to the prejudice or ignorance of the peasant mass, as also to certain hard facts of the situation in and around Russia. The Russian Currency was rehabilitated, and placed on a more stable basis to permit of more reliable calculations in industry and trade. Money economy was, indeed, not restored by this reform of the Currency; but only the tool was made more efficient and reliable than it was proving to be in some other countries. Money still remained a tool, and was in no way permitted to be the master. Private trade within Russia was permitted under certain regulations and restrictions; and even industrial enterprise to foreign concessionaires was allowed with a view to increase production, and so restore the national economy to a point at least equal to the pre-war level. The national Budget was also placed in equilibrium by increased taxation; while the reorganisation of the Proletariat, and the liquidation of illiteracy, were shouldered as among the first tasks of the Revolution.

In all these changes there was no compromise on essentials; in the merely incidentals there was no unreasoning obstinacy. The efforts of the leaders were also directed to increase the strength of the Party at home, and secure recognition of the Soviet regime abroad. The plans of a World Revolution were put into cold storage, since Labour in the capitalist countries around them did not seem ready to follow the Russian example. Socialistic revolts had failed in Italy, Germany, Hungary: and the more moderate parties getting into power were showing a resilience which the Soviet leaders saw no reason to break their heads

against while their own house was not quite in order as designed by them.

But before these efforts could bear the full fruit he had worked for, Lenin, the spirit incarnate of the Communist Revolution, died; and the wisdom, moderation, statesmanship, that had characterised the Soviet Government under him, seemed for a while to be threatened out of existence.

The task of restoration of the Russian national economy to the pre-war level was, though slow, accomplished by 1927. In Agriculture and Industry, in population and trade, Russia had rapidly recovered lost ground, and was brought to pre-war level. Real Communism, in grim earnest, and in unexceptioned practice, began to be given effect to from and after 1928, when the now world-famous scheme of national reconstruction—known as the Five Years' Plan,—was first set on foot.

I cannot stop to discuss in this Lecture how the Five Years' Plan works in practice, how industry is organised, trade controlled, agriculture collectivised, finance provided. I cannot explain how they have evolved a system of co-ordinating the material as well as the human factor to keep up the constant measured progress of the Plan; how they have devised means to collect data for the formulation of the Plan in all its several departments, and the control over its execution, stage by stage, and detail by detail. You must read up these details in any of the hundreds of books now being issued on Russia, each written from a differing angle, but all practically united in the recognition of the tremendous strides made by Russia in economic reorganisation and consequent increase in the wealth of the community under this impetus. In this Lecture I can only give you a summary of the Plan and its proposed achievements, as also the actual results officially admitted to have been realised; and follow this up by some remarks on the Price-level and the factors that in Russia determine the Prices of commodities, wholesale and retail.*

*The summary that follows is taken from the "'*Economic Life of Soviet Russia*" by Calvin Hoover (Macmillan, 1931) pp. 307-315. There is also available in English an official summary, issued by the State Planning Commission, giving the fulfilment of the "First Five Years' Plan for the Development of the National Economy of the U.S.S.R." some of the statistics from which are given in the foot notes to this Chapter. The latest World Economic Survey (for 1933-34) summarises the salient features of this Plan and its achievement as under :—(Contd, on next page)

POPULATION.

It is expected that during the Piatilekta, population will increase by 11.8 per cent.* This is supposed to occur regardless of the Plan, and, having regard for Russian fecundity, it probably will. There is, therefore, no variant given for this estimate. For practically all other figures there are optimum and min'mpm variants, which are supposed to set the limits for the Plan, and to provide some degree of elasticity for it. The urban population is to increase 24.4 per cent. during the five-year period, while the rural population is to increase only 9 per cent. The number of workers for hire is to increase 38.9

Results of the First Five Years' Plan in the U. S. S. R, (in millions)

Product	Unit	1927-28	Production in 1932 Planned Original	Etimate as revised	Actual Results
Coal	Tons	35.4	75.0	90.0	64.2
Petroleum	,,	11.6	21.7	28.0	22.2
Cast Iron	,,	3.3	10.0	9.0	6.2
Steel		4.0	10.4	9.5	5.9
Rolled Steel	,,	3·2	8.0	6.7	4·2
Machinery	Roubles	1822.0	4688.0	6800.0	7361.0
Cotton fabrics:	Metres	2695.0	4670.0	3061.0	2550.0
Boots and Shoes	Pairs	23.0	80.0	92.0	80.0
Electric Energy	Kwt.	5,050.0	17120.0	17000.0	13100.0

"The second Five Year's Plan, which came into operation in 1933, shifts the emphasis from large scale investment industries to agricultural production and consumers goods industries in an effort to raise standards of living" (op, cit loc, cit,)

* The data quoted in regard to the Five Year Plan are taken from *Piatiletnii Plan*, op, cit., or are from compilations based upon data included in it. Most of the data can be found,- pp, 129-164, Vol, 1 Space does not permit direct citation for each item,

per cent., reflecting not merely the increase in population, but the increase of state-operated farms.*

INDUSTRY.

Total capital resources are to increase 82 per cent, while new capital investment is to increase 228 per cent. National income is to increase by 103 per cent. Electrification is to increase at the rate of 425 per cent. over the first year of the Plan, in respect to capital resources, and 336 per cent. in respect to output of electrical energy. The capital funds of industry are to increase by 221 per cent. while the gross product of industry is to increase by 136 per cent.*

The proportion of the national income derived from industry is to increase from 31.6 per cent to 34.2 per cent. The percentage of total yearly capital investment, which constitutes capital investment in industry, is to rise from 23.7 per cent to 26.2 per cent. The production of means of production is to increase from 40.3 per cent of total production to 47.8 per cent, while the production of consumption goods is to fall from 59.7 per cent to 52.2 per cent.†

The production of coal is to increase to 259.5 per cent of pre-war production, of oil to 233.3 percent of pre-war, of peat to 1,000 per cent, of pig-iron to 238.1 per cent, of agricultural machinery to 743.3 per cent, of superphosphate to 1,785 per cent. In the production of consumption goods, cotton yarn is to increase to 228.8 per cent. of pre-war, sugar to 201.6 per cent, galoshes (an extremely important article of wear in Russia) to 267.9 per cent.

* The official summary of the actual achievement of the First Plan gives the following figures in regard to Population (in millions).

	1913	1928	1932	1932% to 1928	1913
Total Population ..	139.3	154.2	165.7	107.5	119.0
Urban	24.7	27.6	38.7	140.2	156.7
Rural	114.6	126.6	127.0	100.3	110.8
Non-agricultural ..	..	32.4	47.4	146.3	..
Agricultural	..	119.9	117.2	98.2	—
Collective Farm ..	..	2.0	66.7	3330.0	
Percentage of Collective farmers in rural non-proletarian Population		1.7	61.6		

† See Foot note on next page.

† *Foot note continued :*

TOTAL CAPITAL INVESTMENTS IN NATIONAL ECONOMY

(In billions of rubles, in prices of the respective years)

Sectors of Nationl Economy.	During restoration period 1923-24 to 1927-28		Estimate for 5-yr. Plan (1928-29 to 1932-33)		Realized in 4¼ years		Investments in 4¼yrs. in %% to	
	Invest-ments.	Percent-age.	Invest-ments	Percent-age	Invest-ments	Percent-age.	Estimate of 5-yr. Plan	Investments during restoration period
Total for National Economy as a whole.	26.5	100.0	64.5	100.0	60.0	100.0	93.0	226.4
A. Socialized Sector	11.1	41.9	46.5	72.7	52.5	87.5	111.9	473.0
B. Private Sector	15.4	58.1	17.6	27.3	7.5	12.5	42.6	48.7

† *Foot note continued :*

CAPITAL INVESTMENTS IN SOCIALIZED SECTOR OF NATIONAL ECONOMY.

(In billions of rubles, in prices of the respective years).

Branches of National Economy.	During restoration period 1923-24 to 1927-28		Estimate for 5 years in 5-yr. Plan		Realized in 4¼ years		Investments in 4¼ yrs. in%% to	
	Invest-ments	Percent-age	Invest-ments	Percent-age	Invest-ments	Percent-age	Estimate of 5-yr. Plan	Investment during restoration period
Total investments in socialized sector	11.1	100.0	46.9	100.0	52.5	100.0	111.9	473.0
Of which :								
1. Industry	4.9	44.2	19.1	40.7	24.8	47.2	129.8	506.1
Group "A"	3.6	32.4	14.7	31.4	21.3	40.6	144.9	591.7
2. Agriculture	0.7	6.3	7.2	15.3	10.8	20.6	150.0	1,542.8
3. Transport	2.7	24.3	9.9	21.1	9.8	18.7	99.0	363.0
4. Communication	0.1	0.9	0.3	0.6	0.56	1.1	186.7	560.0

† *Foot note continued:*

GROSS PRODUCTION OF CENSUS INDUSTRIES.

(In billions of rubles, in prices of 1926-27).

Industries by Groups.	1913	1928	1932	Planned for 1932-33 in 5-yr. Plan	1932 in %% to		
					1932-33 in 5-yr Plan	1928	1913
All Industries	10.25	15.7	34.3	36.6	93.7	218.5	334.5
Group "A"	4.29	7.0	18.0	17.4	103.4	258·6	419.5
Group "B"	5.96	8.7	16.3	19.2	84.9	187.3	273·5
Percentage of Group "A" to total ..	41.8	44.3	52.5	47.5	..	..	..
Percentage of Group "B" to total ..	58.2	55.7	47.5	52.5	..	..	..

Note:—This table gives the indices of the increase in production in the four years of the Five-Year Plan Period in comparison with the 1928 calendar year. Compared with the production during the 1927-28 fiscal year, the gross production of the census industries in 1932 amounted to 233.3%: for Group "A" industries, to 272.7% and for Group "B" to 201.2 %. Compared to the estimate of production for the 1927-28 fiscal year in the Five-Year Plan the production of the census industries in 1932 amounted to 246.8.

† *Foot note continued :*

GROSS PRODUCTION OF THE PRINCIPAL BRANCHES OF INDUSTRY.

(In millions of rubles— in prices of 1926-27).

Industries.	1928	1932	Planned for 1932-33 in 5-yr. Plan.	1932 to 1932-33 in 5-yr. Plan.	1932 to 1928 (In percentage).
Fuel, total	1,079.0	2,382.9	2,387.0	99.8	220,8
Coal	375.2	659.9	740 0	89.2	175,9
Oil	582·7	1,413.0	1,309.0	107.9	242,5
Metal, total	2,722.6	9,032.6	7,100.0	127,2	331,7
Ferrous metals	705.5	1,263.7	1,869.0	67,6	179,1
General machine building, ship building and production of metal goods	1,405.8	5,252.9	2,899.0	181.2	373.6
Agricultural machine building..	176.9	890.4	893.0	99.7	503.3
Electrical equipment	239.3	1,218.3	896.0	136.0	509.1
All machine building, including electrical equipment..	1,822.0	7,361.6	4,688 0	157,0	401,8
Chemicals Group " A "	348.0	1,039.9	1,413.0	73.6	298,8
Timber	836.7	2,400.0	2,803.0	85.6	286.8
Industries producing articles of consumption (without food)	5,408.0	8,997.1	12,233.0	73,5	166.4
Food	1,544.5	3,485.3	3,325.9	103,3	225.6

Gross production of all industry is to increase from 18.3 billions of rubles in 1927-28 to 43.2 billions in 1932-33. Thus the annual value of gross production is to be more than double during the life of the Plan.*

AGRICULTURE.

The increases planned for Agriculture are not so startling as those for industry. Capital resources are to increase by 35 per cent. and gross product is to increase by 55 per cent. The marketable portion of the product is to increase, however, by 105 per cent. The share of the socialized sector in the production of grain is to increase by 652.4 per cent. This estimate includes the share of both the *sovkhozi* and *kolkhozi*. The share of the total production of grain produced by the *kolkhozi* is to increase by 1,030.0 per cent.†

The total sown area is to increase from 99.1 per cent. of the sown area of 1913 to 121 per cent. of the pre-war area. The sown area of grain crops is to increase to only 108.5 per cent., however, while the sown area of technical crops, such as cotton, sugar beets, etc., is to increase to 214.5 per cent. The number of cattle are to increase to 133.7 per cent. of the number for 1913. The production of grain is to increase to 129.5 per cent. of pre-war, of cotton to 256.4 per cent, of flax to 136.5 per cent, of sugar beet to 179.8 per cent. The total value of agricultural production at pre-war prices is to increase to 161.9 per cent. of pre-war production.

CO-OPERATIVES.

The membership of agricultural co-operatives is to increase during the five-year period of 1927-28 to 1932-33 by 148 per cent, the membership of the industrial-handicraft societies by 324 per cent, of consumers' co-operative societies in the cities by 129 per cent, and in the rural districts

* There is an obvious discrepancy between the figures and percentages given above, and those in the foot notes. The explanation lies in the difference of sources from which they are compiled, the former from Prof. Hoover's work already quoted, and the latter from the official, summary so that a considerable part of the collections of 1929 took place during the first year of the Plan. It is the results of this last year which are referred to in the text. Collections of grain for the 1928 harvest were catastrophically bad. (Contd. on next page).

† Summary of the Plan and its Achievements.

Foot note continued :

* THE FOLLOWING STATISTICS GIVE AN IDEA OF THE AGRICULTURAL PROGRESS UNDER THE PLAN

SOWN AREA IN U.S.S.R.

(In million hectares).

—	1913	1928			1932		
			Sown by			Sown by	
	Total area sown	Total area sown	State farms	Collective farms	Total area sown	State farms	Collective farms
Total sown area (for all crops) ..	105.00	112.99	1.74	1.37	134.43	13.5	91.57
Under all grain crops ..	94.36	92.17	1.10	1.04	99.71	9.30	69.12
Under wheat	31.65	27.73	0.35	0.45	34.63	4.51	26.98
Under industrial crops ..	4.55	8.62	0.32	0.16	14.88	0.97	11.35
Cotton	0.69	0.97	0.02	0.02	2.17	0.15	1.4
Long fibre flax ..	..	1.36	0.01	0.01	2.51	0.05	1.59
Sugar beet (for refining) ..	0.65	0.77	0.20	1.01	1.54	0.20	1.11

INCREASE OF SOWN AREA AND THE SHARE OF THE STATE AND COLLECTIVE FARMS IN THE TOTAL SOWN AREA.

—	Percentage of area sown in 1932 to that sown in		Share in %% of area sown by State and collective farms.			
			1928		1932	
	1913	1928	State farms	Collective farms	State farms	Collective farms
Total sown area (for all crops) ..	128·0	119.0	1.5	1.2	10.0	68.1
1. Total grain area	105.7	108.2	1.2	1.1	9 3	69.3
Wheat	109.4	124.9	1.3	1.6	12.7	77 9
2 Industrial crops	327.0	172.6	3.7	1.9	6.5	76.3
Cotton	314.5	223.7	1.5	1.8	6.9	65.8
Long fibre flax	..	184.6	0.3	0.7	2.0	63.3
Sugar beet (for refining)	236.9	200.0	26.0	1.6	13.0	72.1

by 254 per cent. The percentage of persons engaged in work in co-operative organisations is to increase from 3.2 per cent of all persons engaged in work in 1927-28 to 14.4 per cent of such persons in 1932-33. The percentage of total capital resources of the Union owned by co-operatives is to rise from 3.8 per cent. in 1927-28 to 9.3 per cent for 1932-33.

TRANSPORT.

The capital resources of transport are to increase by 89 per cent, while the capital resources of the railroads alone are to increase by 67 per cent. The amount of capital invested in the last year of the Five-Year Plan compared with the year preceding its adoption is to increase by 390 per cent for all transport and 307 per cent for the railroads alone.

BUILDING CONSTRUCTION.

Building construction (without peasant construction) is to increase by 383 per cent during the period.

BUDGET.

The state budget is to increase by 100 per cent. The expenditure for administration is to increase by 41 per cent, while the expenditure on social and cultural institutions is to increase by 145 per cent.*

PRICE LEVEL.

Prices charged for products of state industry at the end of the period are to be only 76 per cent. of those of the year preceding the adoption of the plan. Prices for goods to be used in further production are to be 70.1 per cent. and those of consumers' goods 81.7 per cent of the price level of 1927-28. Wholesale prices of agricultural products are to decline to 96 per cent. of the prepiatiletka year, while wholesale prices of industrial goods are to decline to 77 per cent of the former level. Retail prices for agricultural commodities are to decline to 79.4 per cent. and for industrial products to 77.1 per cent. Costs of construction are to decline to 58.7 per cent. of the former level.

It may be mentioned in this connection that Prices in Soviet Russia are regulated by the State; and and regulation is far more effective than in Capitalistic

* Foot note on next page.

• UNIFIED STATE BUDGET DURING FIRST FIVE-YEAR PLAN PERIOD.
(In billion rubles)

INCICES.	1927-28		1932		Planned for 1932-33 by Five-Year Plan		Percentge of 1932 to		Realized in 4¼ years	
	Amount	in %% to total	Amount	in %% to total	Amount	in %% to total	1932-33 as per Plan	1927-28	Amount	in %% to total
A. Revenues.										
I. From socialized economy.	3.93	75.4	25.20	82.6	8.97	75.9	280.9	641.2	60.07	82.6
Of which : Industry ..	2.43	46.6	16.07	52.7	5.68	48.1	282.9	661.3	38.78	53.3
II. From direct payments of population	0.91	17.5	4.65	15.3	2.18	18.4	213.3	511.0	10.37	14.2
Of which: State loans ..	0.50	9.6	2.78	9.1	1.27	10.7	218.9	556.0	6.25	8.6
III. Miscellaneous ..	0.37	7.1	0.64	2.1	0.67	5.7	95.5	173.0	2 32	3 2
Total Revenues ..	5 21	100 0	30.49	100.0	11.82	100.0	257.6	585.0	72.76	100.0
B. Expenditure.										
I. Financing national economy	2.41	47.7	22.81	75.7	5.85	49.5	389.9	946.5	50.24	69.8
Including:										
a) I dustry (exclusive of food)	0.66	13.0	11.78	39.4	1.67	14.1	710.8	1,798.5	22.99	32.0
(*b*) Agriculture ..	0.26	5.1	3.62	12.0	.93	7.9	389.2	1,392.[illegible]	8.54	11.9
(*c*) Transport and communication ..	0.97	19.2	3.85	12.8	2.13	18.0	180.8	396.9	10.42	14 5

FINANCING OF SOCIAL AND CULTURAL SERVICES DURING FIRST FIVE-YEAR PLAN PERIOD.
(In million rubles.)

—	1927-28 Amount	1932		Planned for 1932-33 by Five Year Plan		1932 in to 1932-33 as per Plan.	Planned for 5 yrs. by Five-Year Plan	Realized in 4¼ years	Realization in to Plan
		Amount	in to 1927-28	Amount	in to 1927-28				
Total Expenditure ..	2,445	10,242	418.9	6,379	260,9	160.6	22,796	26,027	114.2
Of which:									
1. Education	1,063	6,411	603.1	3,349	315.1	191.4	11,290	15,413	136.5
2. Health protection ..	648	2,106	325.0	1,382	213.3	152.4	5.205	5,375	103.3
3. Social welfare and labour protection	734	1,725	235.0	1,648	244.5	104.7	6,301	5,238	83.1
Sources of Appropriation									
1. State budget ..	414	1,791	432.6	1,198	289.4	149.5	4,190	4,603	109.9
2. Local budgets ..	850	2,967	349.1	2,157	253.8	137.6	7,641	8,320	198.9
3. Social insurance ..	921	2,692	292,3	1,923	208.8	140.0	7,215	7,063	97.9
Of which:									
Medical aid fund ..	358	927	258,9	446	124.6	207.8	1,770	2,130	120.3
4. Socialized wage fund ..	—	—	—	449	—	—	1,130	—	—
5. Contributions of economic organizations ..	—1	791	—	—1	—	—	—	2,081	—
6. Miscellaneous ..	260	2,001[1]	769.6	652	250.8	306.9	2,620	3,960[2]	151.1
Total from all sources ..	2,445	10,242	418.9	6,379	260.9	160.6	22,796	26.027	114.2

1. Expenditures of economic organizations on capital constructions for cultural services in 1927-28, in the provisions of the Five-Year Plan for 1932-33 and in the Five-Year Plan as a whole, were covered by appropriations in the State budget.
2. This sum includes contributions from the following resources (in million rubles):

	1932	For 4¼ years
Total Miscellaneous	2,001	3,960
Including:		
(a) Contributions of economic organizations for training cadres, amounting to 4 per cent of the pay rolls ..	652	1,204
(b) Contributions of trade unions ..	571	1,248
(c) Contributions of co-operative organizations ..	254	627

countries, not only because the regulating machinery is worked by the State, but also because all production, distribution, and trade is in the hands of the State. Under these conditions, the fiat of the State that the price of a given article shall be so-and-so works out in practice without fail, and without regard to costs of production, or even the purchasing power of the community. For, since all trade, domestic as well as foreign, is in the hands of the State, competition does not, and cannot, function at all. The State has its own reasons for prescribing, at given times, prices for particular commodities. For instance, it has always aimed, generally speaking, at keeping the prices of consumption goods higher than those of production or investment goods, so as to obtain higher profits, or greater receipts from the taxation of the profits of these consumption-goods industries ; and to use these profits by way of subsidies to the Investment-goods industries, to make up for the latter's relatively lower level of prices. This is a matter of national policy, in which economic considerations of meeting the production costs have only a secondary importance. Similarly, the difference in the price-level of industrial and agricultural commodities—between the town and the country production, is also a matter of state policy—a question of redistributing the burdens of national economy, by this means, more evenly than was the case before a regime of planned economy came into vogue. The action of the so-called "scissors" working against the peasant population has already come to an end ; but, while it lasted, it helped to even up in a manner desired, and determined upon, by the rulers of the Soviet State. Finally, the use of Money has very little to say in regulating the Prices of commodities. It is the settled policy of the Soviet to discourage the use of money, so as to make this instrument of modern economy obtaining an absolute mastery over the whole economic system of the community. Notwithstanding, therefore, continued inflations—and considerable reforms in the Soviet Banking and Credit System,—the chances of a plethora of money dislocating the economic system, and the price mechanism are strictly limited, if they exist at all.

LABOUR.

The productivity of labour is to increase by 110 per cent. In 1927-28 out of every 100 workers of industry, 41.3 were trained workers, 0.6 were technicians, and 0.6

were engineers. In 1932-33, 62 out of 100 will be trained workers, 1.6 will be technicians, and 1.3 will be engineers.

The index of working hours, in percentages of pre-war working hours, is to fall from 77 per cent. in 1927-28 to 70.5 per cent. in 1932-33 The index of real wages is to rise from 122.5 per cent. of pre-war wages in 1927-28 to 208.9 per cent. in 1932-33.

CULTURE.

Literacy is to rise in the city from 78.5 per cent. of persons of eight years of age and above, to 86.7 per cent. while in the rural districts literacy is to increase from 48.3 per cent. to 74.6 per cent. Since theoretically al children in the city of school age are in school, there can be no increase in the number of children in school. But in the village, the percentage of children of school age who are in school is to increase from 79.3 per cent. to 92.4 per cent.

LIVING CONDITIONS.

The area of living quarters per person of the urban population is to increase on the average from 5.70 square metres to 6.30 square metres, while for the workers in planned industry, the increase is to be from 5.60 to 7.30. The per capita consumption of food products by the city population is to change as follows: the consumption of bread is to remain the same, while the consumption of meat is to increase 27.7 per cent, of eggs 72 per cent, of milk products 55.6 per cent. For the rural population the amount of bread consumed is to increase 5.7 per cent, of meat 16.7 per cent., of eggs 45.2 per cent, and of milk products 24.7 per cent.

The structure of the workers' budget is to change as follows: the percentage of income spent for industrial goods is to decrease from 34.2 per cent. to 32.5 per cent, for agricultural products from 43.2 per cent. to 39 per cent: for lodging the percentage is to increase from 8.7 per cent. to 9.5 per cent., while for social cultural needs the expended percentage is to increase from 5.3 per cent. to 8.2 per cent, and for miscellaneous expenses and savings from 8.6 per cent. to 10.8 per cent.

The results of the first year of the Five-Year Plan are now known. Do the data show that the Plan was actually capable of being fulfilled or not? Let us examine first the results of the industrial portion of the plan. The growth of productivity of large-scale industry according to the Plan was to be 21.4 per cent. over 1927-28. The actual results, according to data of the Soviet statisticians, showed a growth of 23.4 per cent. The growth of production of means of production was to be 25.3 per cent. according to the Plan. The actual increase was 26.2 per cent. The production of consumption goods was to increase by 18.6 per cent, while the actual results showed an increase of 21 per cent. However, some important industries did not fulfil the Plan. The production of coal was to increase by 16.1 per cent, while the actual increase was 12.5 per cent. The production of pig-iron was to increase by 24.2 per cent, while the actual increase was 22.5 per cent. The production of steel was to increase by 18.4 per cent, while the actual increase was 13.5 per cent. The production of super-phosphate was to have increased by 74 per cent, and the actual increase was 21 per cent. The production of cotton yarn was to increase by 10.7 per cent; the actual increase was 9.1 per cent. The production of shoes was to increase by 82.6 per cent, while the actual increase was 66.5 per cent.

Capital construction in industry, according to incomplete data, was somewhat greater than provided for in the Plan. The capital funds of industry increased by 18.7 per cent. as compared with the previous year, which was about one per cent. less than the plan.

Quality of production showed deterioration even in comparison with the very low standards of the preceding year. This lowering of quality occurred both in the production of consumption goods and of the means of production. Cost of production in industrial goods, which was to have been lowered by 9 per cent, was actually lowered by not more than 4 per cent.

The results of the agricultural section were not so favourable. The Plan for the total sown area was fulfilled only to the extent of 97.4 per cent. The amount of bread grain collected from the harvest of 1929 was 103 per cent. of the Plan, but this was attained only after methods of collection which were extremely severe, and which left

the country swept bare of any reserves in the hands of the peasants. The collection of technical crops was very unfavourable also. The results of the campaign to collectivize agricultural production by means of the creation of state and collective farms, however, proceeded at a rate more rapid than anyone had expected, and entirely beyond the rate provided for in the Plan.

The sown area of the *sovkhozi* increased in the spring of 1929 by 27.5 per cent, against a planned increase of 7.1 per cent. The sown area of the *kolkhozi* increased 207.1 per cent, against a planned increase of 91.4 per cent. The percentage of the total harvest of bread grains produced in the *sovkhozi* and *kolkhozi* together increased from 2.6 per cent, compared with the increase to 4.9 per cent provided for in the Plan..

Wages were to increase by 5.2 per cent. during the first year of the Piatiletka. Nominal wages did increase, but the failure of the collections of food during the fall of 1928 and the spring of 1929 necessitated the introduction of food rationing, so that it is likely that real wages actually fell, although officially they are supposed to have increased by 3 per cent. to 4 per cent. The output per labourer which was supposed to have increased by 17 per cent, increased by only 15.1 per cent, which was another factor which prevented the growth of real wages. The number of unemployed persons continued to grow during the first year of the Piatiletka at a rate greater than had been planned. However, during the early part of the second year of the Plan, unemployment began to decrease. The number of workers increased at a rate greater than that provided for in the Plan, largely as a result of the mass movement to the cities caused by the more favourable living conditions there.

According to the Piatiletka, it had been intended to increase the reserve of precious metals and stable foreign currency in the State Bank by 500 million rubles during the entire five years of the Plan. During the first year of the Piatiletka the actual increases amounted to slightly less than 90 millions of rubles.. At the same time omissions were greater than had been intended in the Plan. Currency in actual circulation increased from 1,970.8 millions to 2,646.2 millions, or an increase of slightly more than 34 per cent. The ratio of bank-note issue to firm cover was

kept at the legal ratio of 25 per cent. only by the dubious expedient of increasing the legal maximum of uncovered issue of treasury notes from 50 per cent. to 75 per cent. of the bank-note issue. During the period when the monetary issue was thus increasing by 34 per cent. the national income increased by only 18.4 per cent. Moreover, this increase must be largely discounted on account of the fact that it fails to express adequately the decline in agricultural production, and is inflated by the rising price level. In the official Five-Year Plan the rate of increase of the national income is stated to be one of the basic elements in regulating the issue of currency. Thus even if it be accepted that the lack of firm cover is not necessarily an evidence of inflation, it is evident that inflation did occur in its most basic sense.

Unified Financial Plan of the First Five-Years Plan and Its Realisation (in Billion Rubles)

	1928		1932		Realised in $4\frac{1}{4}$ years.		
	Amount	% of Total	Amount	% of Total	Amount	% of Total	% of realisation to Plan.
A: REVENUE.							
I. Income of Socialised Economy.	9.6	73.8	35.8	80.3	89.9	74.9	126.8
Of this Industry ..	4.3	33.5	18.6	41.6	43.4	36.1	129.6
II. Mobilised resources of population.	2.3	17.7	8.2	18.4	21.5	17.9	121.4
Of these Obligatory payments	1.0	7.7	3.0	6.5	7.5	6.2	108.8
Voluntary payments..	1.3	10.0	5.2	11.9	14.0	11.7	133.3
III. Other Income ..	1.1	8.5	0.6	1.3	8.7	7.2	255.9
Total Revenue ..	13.0	100.0	44.6	100.0	120.1	100.0	131.1
B. EXPENDITURE.							
I. Financing National Economy.	7.2	55.4	30.2	67.8	80.3	66.8	141.4
Of this Industry ..	3.2	24.7	16.6	37.2	41.6	34.6	189.1
Agriculture ..	1.2	9.6	5.0	11.2	15.1	12.6	206.8
Transport ..	1.4	11.1	4.9	10.9	12.5	10.4	122.5
II. Financing Social and cultural activity.	3.0	23.0	9.5	21.2	23.9	20.0	111.7
Education ..	1.4	11.0	5.7	12.1	14.1	11.7	135.6
Health	0.6	5.0	2.0	4.7	5.1	4.2	108.5
III. Administration and Defence.	1.6	12.3	2.5	5.6	9.0	7.5	90.0
IV. Other Expenditure ..	1.2	9.3	2.4	5.4	6.9	5.7	202.9
Total Expenditure ..	13.0	100.0	44.6	100.0	120.1	100.0	131.1

LECTURE IX.

ECONOMIC NATIONALISM.

One of the most considerable influences working towards continued Depression in prices is the multiplicity of controls, regulations, and restrictions imposed in the way of international trade, by countries intent upon their own intensive development. Whatever the origin and justification in each given case of the impulse to develop one's own resources to their maximum capacity, the inevitable consequence of such development of each community—irrespective of its size and population, irrespective of its geography and economy—is the prevention of that outlet to carry off surplus production of each community through international trade, and so bring about a sort of equilibrium, which keeps the modern capitalist and commercialised societies going. Without trade, the individualist, capitalist system cannot function; and trade cannot flourish in the face of the restrictions and regulations that have characterised the period under review. Moreover, if trade is impeded or decays, domestic industry suffers; the people engaged in such industry are thrown out of employment; and so depression in prices becomes inevitable.

Because, moreover, one country, or a group of countries, have adopted a policy of intensive self-development, by means of heavy protection to local industry in the shape of Customs duties, or even more direct aid in the form of cash subventions, subsidies, or disguised assistance in shipping or railway freight reductions, exchange manipulations, export credits, and what not—other countries have inevitably to follow suit, if they would not see their very existence endangered because of this race for intensive industrialisation. The vicious circle thus gets completed by communities economically driven, and traditionally inclined to be free-trading—like Britain—adopting an equally rigid exclusionist policy of self-protection. There is thus no end to, no exit from, this maze. The world has to face the spectacle of starvation in the midst of plenty, accumulating stocks on the one hand and steadily increasing production—stimulated in every possible manner, faced on the other hand with impossibility of consuming these stocks, or absorbing this new production. All the devices to control production with a view to its reduction, and in the hope of

lifting depression thereby, are a paradox and an anomaly, in an age when many millions of human beings are starving. However we diagnose the disease, however we camouflage its symptoms, the root feature is the same : it is not so much the lack of purchasing power in the masses ; nor even the absence of modernisation and rationalisation in the organisation, equipment and administration of industry—though these may be undoubtedly present—as the fundamentally vicious basis of the social system, the radically erroneous outlook of our age, which is responsible for the present paradox of growing control over the forces of production, in an age when man's power over the forces of nature is growing so rapidly—side by side with utter disorder in the domain of the distribution of wealth.

It is impossible for me more picturesquely and effectively to give you an idea of the many forms and varieties of modern intensive Economic Nationalism than as given in the several World Economic Surveys conducted by the League of Nations. The tabular summary (see next page) of such devices, as practised in the more important countries, gives a picture essentially unmodified, even though it is a couple of years out of date.

The most considerable variation in this list is to be found in the case of the United States of America, which has abandoned the Gold Standard since 1933 ; and has embarked upon a policy of wholesale national reconstruction, disguised under the forms and terminology of National Recovery programme. The intimate connection between intensive regulation of international trade by means of tariffs, subsidies, bounties, exchange restrictions or controls, deliberate depreciation of national currencies, trade treaties, and their paraphernalia of quotas, etc., etc., needs hardly to be stressed at this time of the day, when every important nation has come to think in terms of a nationally planned economy, and adopted the ideal, in the ultimate analysis, of National self-sufficiency. I have already reviewed the programme of National reconstruction, now in progress, in two such diametrically opposed communities as the U.S.A. and Soviet Russia ; and need only add, in this place, the fact, that in other countries, frankly or silently working out their destinies on the same basis, most of the features of the Russian or American experiment in national reconstruction are being elaborated in one shape or another, under one urge or another.

TABLE VI.

** Summary of the Principal Measures adopted since September 1st, 1931, which affect International Trade and the Balances of Payments.*

Compiled from information available to the Economic Section of the League of Nations at the middle of July 1932).

——	September 1931	October 1931	November 1931
1. Abandonment of Gold Standard or Prohibition of Gold Exports.	Bolivia United Kingdom Columbia Denmark Egypt India Irish Free State Norway Portugal Sweden	Canada Finland	
2. Control of Foreign Exchanges.	Denmark Greece Hungary Persia	Argentine Austria Brazil Bulgaria Czechoslovakia Estonia Finland Latvia Turkey Yugoslavia	Bulgaria Czechoslovakia Estonia South Africa
3. Export bounties ..		South Africa	
Import Duties Taxes imposed Consular fees, etc. — 4. General increase (all items.)		India South Africa	Netherlands
Import Duties Taxes imposed Consular fees, etc. — 5. Increases on individual items	Argentine Columbia Egypt Italy Latvia Poland	Argentine Australia Canada Czechoslovakia Denmark Egypt Lithuania Poland Roumania	Belgium United Kingdom Bulgaria France Persia
6. Import quotas or licensing systems.		Brazil Ltvia	Denmark Turkey
7. Milling regulations	Finland		
8. Import monopolies	Persia	Uruguay	Estonia
9. Import prohibitions.	Columbia France	Latvia	
10. Moratoria on External Public Debt Service.	Brazil	Bolivia	
11. Moratoria on External-Commercial Debt Service.	Uruguay		

TABLE VI—(*Contd.*)

——		December 1931	January 1932	February 1932
1. Abandonment of Gold Standard or Prohibition of Gold Exports		Japan	New Zealand Gold coin not to be exported	Costa Rica Ecuador
2. Control of Foreign Exchanges.		Brazil Bulgaria Chile Italy Norway Venezuela	Czechoslovakia Nicaragua South Africa Turkey Yugoslavia	Denmark Nicaragua Roumania Spain Uruguay
3. Export bounties ..			South Africa	
Import Duties, Taxes imposed, Consular fees, etc.	4. General increase (all items)	Brazil	Norway	Australia 1 Finland Persia Portugal Siam
	5. Increases on individual items	United Kingdom Columbia Czechoslovakia Estonia France Lithuania Switzerland	Austria Columbia Germany Hungary Irish Free State Italy Poland Salvador Switzerland	Belgium Estonia Germany Italy Lithuania Mexico South Africa Sweden Switzerland Venezuela
6. Import quotas or licensing systems		Estonia France Japan Latvia Netherlands Spain	Czechoslovakia Estonia France Hungary Netherlands	Denmark France Itay Latvia Persia Poland Portugal Switzerland
7. Miling regulations			Italy	
8. Import monopolies		Estonia		Sweden
9. Import prohibitions.		Columbia Latvia	Poland	Latvia
10. Moratoria on External Public Debt Service.		Hungary Uruguay		
11. Moratoria on External Commercial Debt Service.				Germany

1 Includes some reductions.

TABLE VI—(*Contd.*)

—		March 1932.	April 1932.	May 1932
1. Abandonment of Gold Standard or Prohibition of Gold Exports			Greece	Bolivia Greece Japan Peru Siam
2. Control of Foreign Exchanges.		Austria Bulgaria Yugoslavia	Argentine Bulgaria Chile Czechoslovakia Ecuador Latvia	Roumania
3. Export bounties ..		Columbia South Africa	South Africa	
Import Duties, Taxes imposed, Consular fees, etc.	4. General increase (all items)	Belgium United Kingdom Poland South Africa Venezuela	France U.S.A.	Czechoslovakia Egypt
	5. Increases on individual items	Bolivia Brazil Egypt Estonia France Guatemala India Irish Free State Mexico Netherlands Roumania Salvador Spain	Belgium United Kingdom Canada China Egypt Irish Free State Italy [1] Mexico Netherlands Spain Sweden Uruguay	Belgium United Kingdom Chile Greece Irish Free State Italy Mexico Sweden
6. Import quotas or licensing systems		Belgium Czechoslovakia France Hungary Netherlands Norway Roumania Switzerland	Austria Belgium Czechoslovakia Hungary Netherlands	Australia Austria Belgium [2] Czechoslovakia Greece Hungary
7. Miling regulations		Czechoslovakia France [1] Portugal	Italy [1]	
8. Import monopolies		Estonia	Estonia Latvia Switzerland	Estonia
9. Import prohibitions.			Greece	
10. Moratoria on External Public Debt Service.		Chile Salvador	Greece Latvia Yugoslavia	
11. Moratoria on External Commercial Debt Service.		Chile Salvador Yugoslavia		

1 Includes some reductions.
2 For further details, see documents E. 757, and supplements and E. 780.

TABLE VI (*concluded*).

—		June 1932	July 1932
1. Abandonment of Gold Standard of Prohibition of Gold Exports.			
2. Control of Foreign Exchanges		Brazil Chile	Lithuania Poland
3. Export bounties			
Import Duties, Taxes imposed, Consular fees, etc.	4. General increase (all items)	Japan Estonia Lithuania	
	5. Increases on individual items	United Kingdom Denmark Egypt Germany Italy Norway Roumania	United Kingdom Irish Free State U. S. A.
6. Import quotas or licensing systems		Belgium Hungary Switzerland	Austria France Hungary Latvia Switzerland
7. Milling regulations		France	
8. Import monopolies.		Uruguay	
9. Import prohibitions		Greece South Afrca	Turkey
10. Moratoria on External Public Debt Service.			
11. Moratoria on External Commercial Debt Service.			

The above list does not claim to give a complete picture of the measures taken to control international trade. It is compiled from information available at Geneva in the middle of July and may not-include measures taken in distant countries in recent months. It does not include :

(a) The measures taken by nearly all countries with a view to exercising supervision over the trade in arms and war material, narcotics and certain products considered injurious to health, immoral literature, etc., or measures of protection against human or animal epidemics, diseases of plants, etc ;

(b) The special measures regulating certain forms of trade between neighbouring countries (frontier quotas etc.)

(c) The supervision of the export trade in certain goods to countries which have the system of "importation bonds" (Einfuhrscheine) or "exportation bonds" (Ausfuhrscheine).

The consequences, however, of an intensive economic nationalism are not equally pleasant all round, even if they may be conceded to be beneficial in some countries, and from a given standpoint. The one essential condition of the successful working out of such a system of intensive nationalism is: that the country must be sufficiently large and populous; sufficiently endowed by nature in the matter of richness of soil, equableness of climate, wealth of mineral resources, and the presence of skilled intelligence, as to be able,—worst coming to the worst,—to live off her own resources. Few countries, however, which claim to-day to have a national destiny, have these indispensable prerequisites of successful economic nationalism, with the exception of such communities, as Soviet Russia, the United States of America, India, or China. The one justification for adopting a policy of exclusiveness and national self-sufficiency is the lag in normal development, the neglect of existing resources and admitted facilities, which historical accidents have forced upon a community like India, China, or Russia. Conditions, however, are not uniformly so favourable, in all communities awakening to their inherent but hitherto neglected possibilities, as to permit them to realise these ambitions without let or hindrance in a given time. Russia could embark on her present programmes of social reconstruction—only at the cost of a bloody revolution following in the wake of a terrible international War. China, nominally independent and a sovereign nation, is faced with an ambitious, all-powerful neighbour, who sees in the intensive development of that country to the full capacity of her resources a menace to her own economic life. It is only the conflicting, but indentical, interests of other nations, concerned in the development of China, which keeps Japan from swallowing China at one gulp. India, we know too well, is neither free nor permitted to embark upon a programme of intensive development and radical reconstruction of her social system, even if the consciousness of her possibilities has penetrated the intelligence of the leaders and spokesmen of her people.

Russia and the United States of America thus remain the only communities able successfully to launch upon such programmes. But even in these cases, the repercussions of a policy of national reconstruction, without a frank and full acceptance of all the implications of such a policy in regard to the social system at home, seem to be scarcely understood even now outside Russia. The Soviet authorities have, indeed, realised the limitations and hardships

of a policy of absolute exclusiveness and complete self-sufficiency; have felt the incompatibility of a communist state in the midst of a commercial world. Their efforts at seeking world recognition and international intercourse evidence this consciousness, and the desire to remedy its evil tendencies.

In other countries, the problem is much too complex and delicate to permit of a reasonable hope of realising such ambitions, especially when other countries, more or less similarly situated, also play the same game. Even the British Commonwealth of Nations cannot achieve a harmony of the divergent forces of local ambitions and imperial unity. The day for economic imperialism, of the type that the British would, if they could, impose upon the rest of their Dominions, Dependencies and Colonies, is ending; and the very fierceness of the effort to keep up summer-time long after autumn has set in proves the imminence of dissolution. The hold of British Imperialism is stronger—as it has been longer established—in this country. But, despite all safeguards and reservations, despite all restrictions of authority of the Indian Government of the future, despite pacts for preferences and treaties of commerce, Imperialism is under notice to quit, no matter how prolonged the agony of its dissolution, how camouflaged the ultimate end.

For the rest, in countries like France, Italy or Germany—not to say Japan or Holland,—the policy of Nationalism must find an effective check in its very success. Hence we notice, in the latest phase of that policy, attempts at negotiating group agreements, as is done by the Danubian countries, and as was dreamt of by the late M. Briand in the shape of a United States of Europe. The World Economic Conference at London in 1933 was an expression of the general desire to relax the tension of nationalism. That gathering proved a failure, because of the still prevailing divergence of purpose in the nations that had gathered there. But the subsequent experience of two years goes far to prove the validity of the lessons taught. Nations of the world are now more amenable to elaborating means to counteract and defeat the original force of intensive nationalism. The British Government have made no secret of their intention to use the Ottawa Plan of Imperial preferences to facilitate negotiation of Trade Treaties with Britain's European and other neighbours or customers to secure a greater freedom of trade, and fuller chance for

British industry, which is to-day impossible in a system of economic nationalism of the most intense description.. Several such treaties have already been concluded. The most recent Trade Treaties breathe a spirit of realism, and contain obvious hints of nationalism finding itself baffled, frustrated, or defeated—at least so far as European countries are concerned. Britain's new protectionism, her new system of guaranteed prices and markets to her agricultural as well as industrial producer, is, for the moment, unshaken. But the force of new alliances is slowly growing; and may quite imperceptibly turn the flank of this costly nationalism.

Japan still remains impenetently nationalist in matters political as well as economic; and so does Germany profess to be nationalist, even though Socialist. But the special circumstances of these countries offer an excuse, which, however, will not endure very long; and may be circumvented by the growth and development, the alliances and associations, of their principal and nearest neighbours.

It may seem strange to record and emphasise these tendencies, at a time when, on the surface at any rate, Economic Nationalism still holds the field all the world over. But though the reaction of the latest negotiations for trade pacts may not be yet discernible to whoever cannot penetrate below the surface and study the roots of social forces; though no reduction worth the name may be recordable as regards tariffs and subsidies and indirect subventions, the tendency is none the less there. In the same way, in the midst of an intensive programme of national reconstruction, seemingly adopted and carried out irrespective of its reaction on other countries, the United States has exhibited signs of its desire to restore exchange stabilisation by supporting France in every recent crisis threatening to throw the principal of the Gold Bloc countries off the rails. In her own domestic affairs, the decision of the Supreme Court in the Gold Clause cases in favour of the Roosevelt policy has brought the day for exchange stabilisation appreciably nearer. The very success of the National Recovery Programme demands such a return to more normal and habitual conditions of world economy;* for when once the President has achieved a rise in domestic prices sufficient to permit an equilibrium being maintained

* As these pages were going through the Press, the Supreme Court has declared the most important sections of the National Recovery Act unconstitutional. President Roosevelt, however, has not lost heart but has replied by getting the legislation re-enacted in amended form.

in national economy,—the general price level to-day is about 30% above the 1933 level, though currency depreciation may be taken to be almost double that figure, and the reported aim of restoring prices to the 1926 level seemingly as distant as ever,—there would be little need for Inflation, little justification for a further depreciation of the Dollar, little benefit from an uncertain foreign exchange system. America has still the whip hand of European nations in the shape of their debts due to the United States, which the strongest of them is not yet strong enough to discharge. And so, if any reorganisation of world economy, any restoration of order out of economic chaos, is to be accomplished with the help and the instrumentality of the United States, there is hope in the very success of America's own national recovery programme being accomplished to the hilt, as the best guarantee of American advice being listened to.

It is unnecessary to recapitulate the local measures of national recovery adopted in the several countries. Generally speaking, two main lines of action seem to be noticeable. On the one hand, cutting down the cost of living,—the most spectacular instance of which is in the wholesale conversions of large blocks of national debts at lower rates of interest in Britain, France, Italy, Germany; and a steady policy of cheap capital for refinancing industry, so as to enable the productive forces of the community to maintain themselves even at lower prices,—has enabled the industry in most of the advanced and better organised countries to weather the force of the worst depression. On the other hand, there are everywhere schemes of national public works, and other direct stimuli to react on employment and solve thereby the problem of unemployment,—which also aid in raising the purchasing power of the masses in each country. Inasmuch as each country seeks to guard its own capital and labour against exploitation by an economically stronger neighbour by measures of local safeguarding and protection, there is not much risk of the effect of these artificial stimuli being wasted or dissipated. Industrial recovery is thus considerable in countries like Britain or America, which have felt the force of present day depression most acutely. Whether that recovery will ultimately help to cure permanently the inherent evils of the present individualist society, based upon private property and motived by personal gain, remains to be seen.

CHAPTER X.

SUMMARY OF CONCLUSIONS.

I have now reviewed before you the movements of Prices, and their causes, in the several countries, as well as in different epochs of the period studied. We have seen the changes effected by the War in the industrial organisation of the leading countries, as also in their commercial importance; and considered the reaction of those changes under conditions of post-war demobilisation. We have reviewed the efforts at national rehabilitation characteristic of the period immediately following the war, and considered the attempts at industrial rationalisation and commercial reorganisation necessitated by those attempts all over the world, with special reference to the reaction of those efforts on the price-movements. We have, finally, examined the causes and consequences of the recent and prolonged Depression in trade and industry all over the world, and studied the endeavours made, in Russia and the United States, particularly, to bring about a radical reconstruction of the entire socio-economic system, so as to avoid these serious dislocations of industry and commerce. It now remains to summarise the conclusions gleaned from such a review, and add a few reflections suggested by these considerations.

To take the last world phenomenon first, the present Depression, it was noted, is not a case of mankind having lost any part of its productive capacity or equipment, as happens after a great famine, epidemic, or war. The damage to life and property wrought by the World-War has been more than made good in almost every country affected by it; so that, that is no true explanation of the present Depression. Nor has our productive capacity and equipment suffered in proportion to the strain put upon the same by forces of demand. For, though world population has increased since before the war, the rate of that increase is considerably below the increase in man's productive resources. In this crisis, therefore, there is no question of man's inability to produce all the utilities he needs to en-

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The bulk of this chapter is adapted from the *World Depression*, pp. 123-206, by the present writer.

sure that standard of life and work, which is generally deemed to be necessary for the proper functioning of social economy.

But, though all the loss and wastage of war-time have been made good, man's passions of hate and greed prevent this accomplishment being recognised. The result is that the claims in respect of the alleged loss and damage, caused to some of the former belligerents by others, and required by the former to be made good by the latter, still continue to vitiate the dealings between man and man, and clog the machinery whereby these dealings have to be carried out.

Because of the existence of this man-made lag, the necessary parts of the mechanism, which, in practice, are indispensable for the working of the machinery, are also thrown out of gear. If there is not a smooth and prompt distribution of the utilities produced; if there is not a quick disposal, their stocks go on accumulating, what time the original productive mechanism goes on adding still further to the aggregate of these stocks. With this increase in supply, the prices of commodities are depressed; and because prices are so depressed, the expected net return from the enterprise declines. As this is a material consideration in keeping the whole machinery of individualist production going, the decline or disappearance in the profits of the entrepreneur leads to a cutting down of the expenses of production, which most commonly and easily takes the form of disbanding the worker, or reducing his wages. The workers, thus thrown out of employment, or with a reduced income, are unable to provide themselves with the necessaries of life; and this fact, reducing the demand, still further lowers prices. This is the essential explanation of the present Depression all over the world, whatever its special phase and particular occasion or origin may be in any given country.

Had this phenomenon been localised and isolated, it might have been remedied by removing the surplus population of one place, suffering from such Depression, to another free from it. Such a remedy is, I am aware, more easily suggested than applied. Labour, even under modern conditions of a free contract of service and rapid transport, is not so easily movable from place to place as Capital. Hence, despite all the effects of Depression and Unemploy-

ment, the affected Labour continues in the same place long after the evil has become manifest. When, however, the phenomenon is on such a world scale, from which scarcely a single country is exempt, that remedy is not even theoretically possible.

While prices remain thus depressed, and unemployment goes on growing, the other parts of the economic machinery also cannot avoid being affected. The Currency, and the credit system raised upon it, as well as the general productive organisation, are the next to be involved. Credit gets strained first, probably because profits seem to decline, and the expected return does not materialise.

Because of these disturbances, the movement of goods and services do not take place with the smoothness and rapidity with which they were intended to take place. Now, as the Credit arrangements were originally attuned to a given rapidity of turnover, there needs must be dislocation when that rapidity ceases. A remedy for this specific evil, when manifest, is first sought in reconditioning and manipulating the Currency—by changing the basis of the money material, by operating upon the volume of the circulation, and thereby seeking to regulate prices. But the remedy involves its own complications. If the volume of currency is contracted, with a view to reduce prices, the fall affects the trade all over the world, and so the solution sought for the original depression does not result. Wherever a country is particularly concerned in maintaining its foreign trade,—as most of the nations of Europe seem to be—the local depression in prices caused by an artificial contraction of currency, reacts upon the affected country's foreign trade, by making it unable to compete in the world markets.*

If the volume of circulation is, on the other hand, raised, prices may rise for a time. But this method is so easy to adopt, and the occasions on which it might be

* Not the least portion of the blame for the present Depression in Britain is assigned, by authoritative and well-informed opinion, to a premature return in 1925 of the Pound Sterling to its old gold parity. Because at the time the new rate did not correspond to the real state of affairs in the commercial world, it naturally compelled Britain to adopt a policy of deflation, with an artificially lowered standard of local prices, which only led to an unnecessary handicap on the trade of that country in the world at large.

adopted so numerous, that once it is tried at all, there is no limit to which it cannot be extended. Whether it takes the form of abandoning the Gold Standard, as it did in the recent crisis ; or manifests itself in the direct watering of the currency, as during the period of Mark inflation in Germany, the results are similar. The rise in prices, induced by this means, is not a rise controlled, as by the mechanism raising the sluice-gates on the headwaters of a canal system, letting in just enough water-supply that may be needed. Prices are raised by this means indefinitely and uncontrollably, to the utter confusion and dislocation of the entire economic machinery. Besides, even when this remedy is applied within limited proportions—*e.g.* in a simple abandonment of the Gold Standard, without a concurrent watering of the currency—if it is applied by a number of nations simultaneously,—as it is bound to be, its effect is neutralised automatically. Money ceases to be a measure of value, and exchanges are made on the basis of the purchasing power parities. The result is that manipulation of the currency system, and of its offshoot—the rate of exchange—of a given local currency into other international media of exchange, vaccillates between two extremes, each applied to correct a particular evil, but neither resulting in the end really sought, nor curing the disease intended to be remedied.

Contributory causes have also been at work to explain the arrival and deepening of the Depression. The existence of inaccessible tariff walls impeding trade and the movement of capital from country to country are among the most considerable of these contributory causes and subsidiary influences. The weakening of international credit, the birth of suspicion and distrust, intensifying the impediments, the obstruction caused by the legacy of the European War, in the shape, not only of War Debts and Reparations, but also in the guise of new nations and new frontiers—with their intensive measures of self-protection and consequent obstacles to trade—these all have led to the deepening and worsening of the crisis, when once it had been engendered. But, though we must assign their due place to each of these subsidiary factors, we must not overlook or forget the real genesis of the Depression—the incompatibility between our present productive organisation and the distributive—or consumption—machinery.

The Depression is, in this conception, a man-made phenomenon, which admits of a man-made cure much more

readily than if it had been caused by super-human forces working in despite of man. Man has but to remove some of the impediments and obstruction of his own creation; he has but to modify the system of economic life under which he has been living hitherto; he has but to alter, re-adapt, or discard some of the basic institutions and governing ideals of this age of commercialism—wherein the Montechristine philosophy of everything being open to sale, provided one has the means to buy it, reigns supreme, —and this particular trouble would vanish.

Let us, then, consider now the remedies proposed—or those which we can think of from our own review of the social *malaise*—to put an end to the present Depression. These remedies may be examined under 2 main groups; on the one hand, we may range these remedies, which, already suggested or adopted, in one place or another, relate to the particular disease that is locally supposed to be the root cause of the evil; and, on the other, are remedies, which, suggested or not, lie much deeper, concern the very roots of the present evil, and affect the very foundations of our present socio-economic system. These alone can assure us permanently against the recurrence of this economic pest,

Let us consider both these groups of solutions, one by one. In the former category are:

(*a*) Revision of the entire problem of international indebtedness, and the mode of effecting payments in regard thereto. This includes, obviously, the question of intergovernmental debts, hailing from the War days, and its connected aspect of Reparations expected to be obtained by the victors from the vanquished. But, deeper than this lies the question of debts as between one country and another—short term or long term—which are not owed by the government of one country to that of another; but which are owed by the citizens collectively of one country to those of another, which have arisen in the ordinary course of commercial dealings, or industrial investments or banking credits, and which nowadays form the most considerable difficulty in the way of remedying the Depression, being intimately connected with that collective phenomenon. By analogy, at least, the

cognate question of internal debts, as between a government and its people, or as between private citizens within a State, is also important.

(*b*) While the process of liquidation of the former class of debts is naturally different from that of the latter, they both affect ultimately and unavoidably the general state of international trade as between the countries affected particularly. The payments by the debtor countries to the creditors must eventually come from the production surplus —from the goods and services—of the debtors. The creditors must, therefore, keep the door open to such goods or services imported into their boundaries for making those payments. But if the creditor keeps the door open to this stream, the danger is very imminent and considerable that its own local producer may suffer far more from the receipt of these imports, than the country as a whole benefits from receiving them. This is a most serious matter of national existence and future in a country, which, having ample resources in men and material, is nevertheless impeded, by some accident of its history, from the course of natural, legitimate, intensive development of its own industry and agriculture. The right of each community to develop unhindered its own local resources to the utmost possible—if only to add to the sum total of the services and the material utilities for the greater ease and comfort of mankind,—is impossible to question, by anybody who has no desire to oppress, exploit, or defraud any section of his fellows for his own benefit. Given this right, on the one hand, and the necessity of effecting payments of international obligations of the type already illustrated, on the other, the dilemma proves extremely embarrassing. The nature, conditions and restrictions or impediments in the way of international trade demand, therefore, close consideration.

(*c*) The consideration, moreover, of the problem of these trade payments, and the discharge of other obligations as between nations, leads to a serious consideration of the media, or mechanism, of payment ; as well as of the streams of capital resources from one country to another—from the

more developed to the more backward—with a view to a still further stimulation of the process of production. Recent experiments by distressed nations in this behalf demand a revision of our present day institutions and methods of effecting these payments. The banking and creditor organisation of the world, in other words, must be overhauled to make them more rational and smooth, better co-ordinated and adapted to bear the strain that must inevitably fall upon them.

(*d*) The reaction, by analogy at least, of all these upon private individual relations —at least in regard to their economic expression —is, though not immediately necessary, ultimately inevitable to consider. Private imdebtedness imposes a strain not a whit less severe on man's productiveness than international indebtedness. Particularly is this the case in regard to long-term loans and investments in enterprise whose productivity is liable to considerable vicissitudes, as in agriculture in an ancient country with innumerable socio-economic considerations affecting and complicating that branch of production.

I have deliberately stated these remedies in their generic form, so as to facilitate the discussion of the specific expression of each under more than one category if such inclusion is needed for a comprehensive and proper consideration of the same. These are, however—when everything is said in their favour; and when they have been applied under the very best circumstances and conditions imaginable—only palliatives, mere tinkering with the problem which barely touch the fringe of the real evil. It is the second category of remedies which must prove the most efficacious in the long run. If we would consider, however, some means of permanent cure to this evil and guarantee against its recurrence, let us search for the roots of the evil.

(*a*) They lie in the social system primarily which lays such a disproportionate emphasis on Exchange, and which is therefore ready to throw the rest of the mechanism out of gear if it could safeguard its own fundamentally vicious basis. Society being founded on and for Exchange, the ideal of self-sufficiency is ridiculed and discounted, even

for those communities, for which —as in Russia, India or the United States —it has more than a sporting chance of being realised. The result is a distorted distribution of the productive organisation, facilities, or equipment, which because it is initially unnatural, inevitably results in the aggregate volume of production being much less than man has, with his present command over nature, the right to expect. The doctrine of the Classical Economists about a Territorial Division of Labour, condemning the tropical countries like India or Africa, to be for ever producers of raw materials ; and reserving the termperate regions for their manufacture into finished goods—had some semblance of reason if not justice, when the economic exchange of goods and services was to be regulated exclusively by free competition. Even, however, in the days when classical economics was at its height, this doctrine was of little more than theoretical validity. For competition, even if it was ever free, was nowhere between equals. But in these days of intensive nationalism by microscopic units, and excessive self-protectionism, the principle of a Territorial Division of Labour as an ordination of providence has no place at all.

(*b*) Side by side with the general organisation of the productive machinery as a whole, must be considered that particular aspect of it, which relates to the present emergency or Depression, namely a break-down of the nexus by which production as it takes place, should be absorbed and disposed of. As I explained to you last time, no one who realises the handicaps on the productive energy of man ; no one who realises the strain upon that energy in the shape of the demand that has to be met, can question the wisdom of improving and perfecting and advancing our productive organisation and equipment to the best and the utmost we can. The cause of Depression lies, not in an excess of production,—as the orthodox economists often suggested —but in the inadequacy of the means to liquidate the productivity to dispose of the produce as and when it takes place. We are suffering, not from superabundance, but from maladjustment. It is a question simply of machinery, not of the basis. Large tracts of the world, and great blocks of its population, still live very much below the margin of the merest subsistance, let alone any claim to any standard of culture, comfort, or even decency. And so long as there are such regions undeveloped, and such peoples below the minimum of human life, we can never really be said to have absolute superabundance. Our

present day plenty, in some countries, is only in appearance; while living below the margin of subsistance is a grim reality wherever it obtains. The problem, therefore, raised by the present Depression before civilised and thoughtful men, concerns the ways and means by which production, however rapidly increasing, should get absorbed as soon as it takes place. There must be no hiatus caused by unemployment due to disjointed production.

(*c*) The scheme of values, moreover, connected with this basic system, must also be reconsidered, in the light of our changed ideals and altered circumstances; and the motive force—the search for personal gain—must be wholly remoulded. If production ceases to be exclusively for Exchange; if the motive of individual gain is abolished, the basic institutions of modern economic society—like private property—would undergo a radical change automatically; and the havoc, for which modern individualism and capitalism must be held responsible, will cease to be. Depression would be a thing of the past, as dead as the dodo, only when we have remedied these root evils of the present economic system.

I have reviewed, in another work, the several specific remedies, or relief measures, suggested by the Experts who prepared the agenda for the World Economic Conference of 1933; and have also referred to them in these Lectures when dealing specifically with the prevailing World Depression. There is, therefore, no need to repeat here the observations already made in that connection. We must note, however, in this place also, that, so long as the present individualist system lasts; and so long as its main motive of private greed dominates our economic action, the factors, which would otherwise tend to the greater happiness and more material progress of mankind, actually result in making confusion worse confounded, and adding to the chaos and anarchy so characteristic of our present day commercial society. Note particularly the fact that Rationalisation of Industry has resulted in growing Unemployment and increasing poverty; control of exchanges in the stoppage of international trade; regulation of credit and currency in a dislocation of the entire mechanism of exchange, on which as on a pivot, the present economic system rests. These are not bad in themselves; nor need they be condemned as peculiar marks of a capitalist, commercial, individualist society. Even in a scientifically

organised society, and systematically planned economy, these features may have to be adopted. What is wrong with the present system is its essentially false basis; its unsocial motive power; its mistaken outlook on the purpose of human activity and the goal of social effort. It is to reconstruct these, and as a sort of insurance against the recurrence of the present ills, I have indicated, among the measures of permanent cure:—

(a) The *principle of Planning*, as of a single unit, the entire socio-economic mechanism of the world, with a view to the fullest possible development of man's initial endowment by Mother Nature, in the shape both of the material resources and human skill.

(b) Given a proper, comprehensive planning, as of a single unit, and with a definite purpose, the world population as well as the world production may have to be wholly redistributed, as much to avoid local congestion as to exploit more fully, with the appropriate labour, the resources of large blocks of territories, which to-day remain unutilised simply for want of suitable labour.

(c) To achieve this most ambitious programme of world reconstruction and human insurance against Depression and destitution, we must recast radically some of the most fundamental institutions of the modern commercial society, and revise its governing motive forces. We must substitute, as a motive force, the ideal of common service and mutual co-operation for the presentday anarchic action of individual greed and profit-seeking. We must, as an inevitable corrollary of this, abolish private property, and discontinue the principle of inheritance by children from their parents of material wealth. We must, finally, revise fundamentally our modern notion of a socio-economic unit, and particularly discard our ideal of the individual sovereign State. Common action is impossible to concert, and still more impossible to give effect to, while the individualist State endures. The world conferences of experts and representatives are no doubt the fore-runners of the Parliament of Man; and the all-power treaties for some common end, *e.g.* Disarma-

ment, or regulation of traffic in intoxicants, or of juvenile or female labour—are the harbingers of concerted action. But, in themselves, these, however promising, are ineffectual, so long as the spectre of the absolute sovereignty of individual states remains in the background, beckoning the erring and the misguided to return to the tree of temptation and eat the forbidden fruit. The State must, therefore, go the way of all flesh.

(*d*) The adoption of the Conscription of Labour for productive purposes, and the consequent abolition of the parasite class, must precede, as the unavoidable prerequisite of such social reconstruction and reinsurance. No one would put out his best effort, so long as there is a feeling that the real fruits of his labour may be enjoyed by another, as happens inevitably in the capitalistic economy. The Weimar constitution of the German Reisch contained a specific clause enjoining upon every citizen of the Republic the duty to work, to give the full benefit of the mental or physical powers that each may possess for the common service. The analogy of this clause may be easily extended to embrace all mankind ; and the Conscription of Labour, resulting in consequence, may be utilised to solve much of the present difficulty that seems so insoluble.

(*e*) Trade will not disappear, on this basis of social life and activity. It will, however, be made much more rational or natural ; and will be shorn of its present sting of being suspected to be a form of exploitation. Exchange will have to be, both locally and internationally—or interregionally. But that will be an exchange of veritable surplus and speciality, which to-day is only a figment of the imagination. It will be determined, after due regard to local needs, by the common council of each region ; and it will be conducted on the principle of a co-operative or collectivist enterprise, in which there will be—there can be—no element of individual gain. Production will, at the same time, be rationalised and developed, so that there need be no crisis caused by absolute dearth or scarcity ; while, because of this increased production, and a simultaneous rationalisation of the mechanism of

distribution there will be no accumulation of stocks, nor loss of purchasing power due to unemployment.

These are radical remedies; but without them there is no hope of a lasting solution of the world chaos. In it, India has a place, all its own. I have tried to show, in the preceding Lectures, how, without any fault of her own, without any considerable falling off in her productive power, this country has been most intensely affected by the Depression. Its way out of that Depression lies in developing its productive resources still further; but, still more, in its rationalising the currency and credit systems, which are worked in India on lines more obsolete than anywhere else. My claim for a greater industrialisation of India is not couched in any desire to repeat the follies and crimes of the exploiting capitalistic communities that are responsible for the chaos existing to-day. I woud be no party to making our power and plenty a curse and an oppression of the rest of our fellow human beings. My demand for the development of the yet untried resources of India is as much with a view to increase the very poor share of the individual's wealth in this country,—so as to bring him up to the minimum of civilised life; but also with a view to make India contribute to the utmost of her ability to the common well-being of mankind. India is poor to-day. Her poverty makes the world poorer by the absence of what India can contribute to its progress. But India has a margin, also, for development, which is being ignored and neglected to-day. Within a period of less than a generation, Akbar, after abolishing a number of taxes, and reducing the burden of the remainder, left a treasure at his death computed in hundreds of millions sterling. In the last three quarters of a century, India has been so ground down by taxation, that an official apologist, a well-known Professor of Economics, has to evolve a new theory of taxable capacity, making it synonymous with sqeezability. Despite this increase in taxation, the national balance sheet shows a deficit which is made up of hundreds of crores of Debt. But that does not suffice to convince me that India is irretrievably ruined, without resources and without possibilities, without a hope or a future. Just as in the days of Akbar, India recovered, as by a bound, from the darkness and depression of 300 years of gloom, so also, if only she would be enabled to put forth her best effort, she could to-day resume her interrupted contribution for the com-

mon well-being. If you will excuse my striking a personal note, I once wrote a book called the " *Splendour That Was 'Ind*". I now dream of another, which I would like to call: " *The Promise That is 'Ind* ". I still believe in the future of this land of promise. And that not only for our own immediate good, or material well-being. Have our people got starved and maimed? Have our young men got blighted, despondent, and our young women ignorant of the beauty of life and the pleasure of living? Have our children gone hungry, untaught, unknown to fame, unaware of the *joie de vivre*? Let us not leave them any longer in that stage, scarcely better than the brute's. Let us wake them, and train them in determination, school them in suffering, and lead them to that temple of Humanity for worship on the altar of Service, which has ever blazed in this land of Harischandra and Bodhisatva; with willing oblations offered without stint or sorrow to the genius of mankind. And then there will be no Depression, no Unemployment, no Starvation, I can assure you. Good Night.

END

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